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LAMPIRAN

Lampiran 1. Data Kurs Referensi

Tanggal	Kurs JISDOR	Tanggal	Kurs JISDOR	Tanggal	Kurs JISDOR
1/2/2015	12,474	3/3/2015	12,962	4/30/2015	12,937
1/5/2015	12,589	3/4/2015	12,963	5/4/2015	13,021
1/6/2015	12,658	3/5/2015	13,022	5/5/2015	12,993
1/7/2015	12,732	3/6/2015	12,983	5/6/2015	13,040
1/8/2015	12,731	3/9/2015	13,047	5/7/2015	13,065
1/9/2015	12,640	3/10/2015	13,059	5/8/2015	13,177
1/12/2015	12,568	3/11/2015	13,164	5/11/2015	13,116
1/13/2015	12,608	3/12/2015	13,176	5/12/2015	13,203
1/14/2015	12,580	3/13/2015	13,191	5/13/2015	13,188
1/15/2015	12,617	3/16/2015	13,237	5/15/2015	13,090
1/16/2015	12,593	3/17/2015	13,209	5/18/2015	13,116
1/19/2015	12,612	3/18/2015	13,164	5/19/2015	13,183
1/20/2015	12,659	3/19/2015	13,008	5/20/2015	13,169
1/21/2015	12,557	3/20/2015	13,075	5/21/2015	13,150
1/22/2015	12,451	3/23/2015	13,076	5/22/2015	13,136
1/23/2015	12,444	3/24/2015	12,972	5/25/2015	13,186
1/26/2015	12,517	3/25/2015	12,932	5/26/2015	13,192
1/27/2015	12,493	3/26/2015	13,003	5/27/2015	13,229
1/28/2015	12,498	3/27/2015	13,064	5/28/2015	13,205
1/29/2015	12,515	3/30/2015	13,086	5/29/2015	13,211
1/30/2015	12,625	3/31/2015	13,084	6/1/2015	13,230
2/2/2015	12,700	4/1/2015	13,043	6/3/2015	13,196
2/3/2015	12,643	4/2/2015	13,000	6/4/2015	13,243
2/4/2015	12,609	4/6/2015	12,942	6/5/2015	13,288
2/5/2015	12,653	4/7/2015	12,982	6/8/2015	13,360
2/6/2015	12,613	4/8/2015	13,002	6/9/2015	13,362
2/9/2015	12,679	4/9/2015	12,973	6/10/2015	13,329
2/10/2015	12,644	4/10/2015	12,910	6/11/2015	13,292
2/11/2015	12,700	4/13/2015	12,945	6/12/2015	13,317
2/12/2015	12,794	4/14/2015	12,979	6/15/2015	13,333
2/13/2015	12,769	4/15/2015	12,976	6/16/2015	13,333
2/16/2015	12,742	4/16/2015	12,838	6/17/2015	13,367
2/17/2015	12,757	4/17/2015	12,863	6/18/2015	13,341
2/18/2015	12,804	4/20/2015	12,875	6/19/2015	13,324
2/20/2015	12,849	4/21/2015	12,942	6/22/2015	13,318
2/23/2015	12,813	4/22/2015	12,952	6/23/2015	13,316
2/24/2015	12,866	4/23/2015	12,939	6/24/2015	13,280
2/25/2015	12,887	4/24/2015	12,941	6/25/2015	13,323
2/26/2015	12,862	4/27/2015	12,922	6/26/2015	13,338
2/27/2015	12,863	4/28/2015	12,978	6/29/2015	13,356
3/2/2015	12,993	4/29/2015	12,964	6/30/2015	13,332



Tanggal	Kurs JISDOR
7/1/2015	13,331
7/2/2015	13,337
7/3/2015	13,316
7/6/2015	13,353
7/7/2015	13,313
7/8/2015	13,346
7/9/2015	13,347
7/10/2015	13,304
7/13/2015	13,309
7/14/2015	13,320
7/15/2015	13,329
7/22/2015	13,368
7/23/2015	13,394
7/24/2015	13,448
7/27/2015	13,453
7/28/2015	13,460
7/29/2015	13,444
7/30/2015	13,468
7/31/2015	13,481
8/3/2015	13,492
8/4/2015	13,495
8/5/2015	13,517
8/6/2015	13,529
8/7/2015	13,536
8/10/2015	13,536
8/11/2015	13,541
8/12/2015	13,758
8/13/2015	13,747
8/14/2015	13,763
8/18/2015	13,831
8/19/2015	13,824
8/20/2015	13,838
8/21/2015	13,895
8/24/2015	13,998
8/25/2015	14,067
8/26/2015	14,102
8/27/2015	14,128
8/28/2015	14,011
8/31/2015	14,027
9/1/2015	14,081
9/2/2015	14,127
9/3/2015	14,160
9/4/2015	14,178
9/7/2015	14,234
9/8/2015	14,285
9/9/2015	14,244
9/10/2015	14,322
9/11/2015	14,306

Tanggal	Kurs JISDOR
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9/15/2015	14,371
9/16/2015	14,442
9/17/2015	14,452
9/18/2015	14,463
9/21/2015	14,451
9/22/2015	14,486
9/23/2015	14,623
9/25/2015	14,690
9/28/2015	14,696
9/29/2015	14,728
9/30/2015	14,657
10/1/2015	14,654
10/2/2015	14,709
10/5/2015	14,604
10/6/2015	14,382
10/7/2015	14,065
10/8/2015	13,809
10/9/2015	13,521
10/12/2015	13,466
10/13/2015	13,557
10/15/2015	13,288
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10/19/2015	13,563
10/20/2015	13,634
10/21/2015	13,696
10/22/2015	13,640
10/23/2015	13,491
10/26/2015	13,643
10/27/2015	13,626
10/28/2015	13,630
10/29/2015	13,562
10/30/2015	13,639
11/2/2015	13,682
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11/4/2015	13,461
11/5/2015	13,603
11/6/2015	13,550
11/9/2015	13,687
11/10/2015	13,619
11/11/2015	13,576
11/12/2015	13,575
11/13/2015	13,633
11/16/2015	13,732
11/17/2015	13,711
11/18/2015	13,763
11/19/2015	13,787
11/20/2015	13,739

Tanggal	Kurs JISDOR
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11/24/2015	13,723
11/25/2015	13,673
11/26/2015	13,733
11/27/2015	13,747
11/30/2015	13,840
12/1/2015	13,808
12/2/2015	13,757
12/3/2015	13,845
12/4/2015	13,833
12/7/2015	13,837
12/8/2015	13,853
12/10/2015	13,954
12/11/2015	13,937
12/14/2015	14,076
12/15/2015	14,065
12/16/2015	14,050
12/17/2015	14,028
12/18/2015	14,032
12/21/2015	13,872
12/22/2015	13,615
12/23/2015	13,644
12/28/2015	13,639
12/29/2015	13,658
12/30/2015	13,794
12/31/2015	13,795
1/4/2016	13,898
1/5/2016	13,931
1/6/2016	13,863
1/7/2016	13,946
1/8/2016	13,874
1/11/2016	13,935
1/12/2016	13,835
1/13/2016	13,861
1/14/2016	13,877
1/15/2016	13,886
1/18/2016	13,931
1/19/2016	13,921
1/20/2016	13,896
1/21/2016	13,899
1/22/2016	13,874
1/25/2016	13,844
1/26/2016	13,904
1/27/2016	13,871
1/28/2016	13,889
1/29/2016	13,846
2/1/2016	13,699
2/2/2016	13,621



Tanggal	Kurs JISDOR
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2/4/2016	13,662
2/5/2016	13,653
2/9/2016	13,689
2/10/2016	13,538
2/11/2016	13,369
2/12/2016	13,471
2/15/2016	13,476
2/16/2016	13,333
2/17/2016	13,504
2/18/2016	13,479
2/19/2016	13,549
2/22/2016	13,460
2/23/2016	13,397
2/24/2016	13,446
2/25/2016	13,416
2/26/2016	13,400
2/29/2016	13,395
3/1/2016	13,367
3/2/2016	13,314
3/3/2016	13,260
3/4/2016	13,159
3/7/2016	13,029
3/8/2016	13,128
3/10/2016	13,149
3/11/2016	13,087
3/14/2016	13,020
3/15/2016	13,087
3/16/2016	13,169
3/17/2016	13,166
3/18/2016	13,048
3/21/2016	13,160
3/22/2016	13,175
3/23/2016	13,167
3/24/2016	13,250
3/28/2016	13,323
3/29/2016	13,363
3/30/2016	13,359
3/31/2016	13,276
4/1/2016	13,200
4/4/2016	13,145
4/5/2016	13,217
4/6/2016	13,223
4/7/2016	13,197
4/8/2016	13,169
4/11/2016	13,134
4/12/2016	13,123
4/13/2016	13,096

Tanggal	Kurs JISDOR
4/14/2016	13,238
4/15/2016	13,166
4/18/2016	13,204
4/19/2016	13,150
4/20/2016	13,133
4/21/2016	13,182
4/22/2016	13,169
4/25/2016	13,235
4/26/2016	13,215
4/27/2016	13,173
4/28/2016	13,204
4/29/2016	13,204
5/2/2016	13,192
5/3/2016	13,162
5/4/2016	13,246
5/9/2016	13,284
5/10/2016	13,333
5/11/2016	13,271
5/12/2016	13,299
5/13/2016	13,311
5/16/2016	13,328
5/17/2016	13,278
5/18/2016	13,319
5/19/2016	13,467
5/20/2016	13,573
5/23/2016	13,607
5/24/2016	13,606
5/25/2016	13,671
5/26/2016	13,615
5/27/2016	13,575
5/30/2016	13,641
5/31/2016	13,615
6/1/2016	13,671
6/2/2016	13,695
6/3/2016	13,612
6/6/2016	13,478
6/7/2016	13,375
6/8/2016	13,241
6/9/2016	13,231
6/10/2016	13,309
6/13/2016	13,341
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6/15/2016	13,398
6/16/2016	13,327
6/17/2016	13,358
6/20/2016	13,260
6/21/2016	13,286
6/22/2016	13,298

Tanggal	Kurs JISDOR
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6/24/2016	13,296
6/27/2016	13,495
6/28/2016	13,256
6/29/2016	13,166
6/30/2016	13,180
7/1/2016	13,172
7/11/2016	13,112
7/12/2016	13,151
7/13/2016	13,095
7/14/2016	13,088
7/15/2016	13,086
7/18/2016	13,112
7/19/2016	13,086
7/20/2016	13,100
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7/22/2016	13,102
7/25/2016	13,135
7/26/2016	13,150
7/27/2016	13,130
7/28/2016	13,113
7/29/2016	13,094
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8/2/2016	13,079
8/3/2016	13,114
8/4/2016	13,138
8/5/2016	13,125
8/8/2016	13,144
8/9/2016	13,133
8/10/2016	13,123
8/11/2016	13,113
8/12/2016	13,120
8/15/2016	13,121
8/16/2016	13,098
8/18/2016	13,114
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8/22/2016	13,197
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8/30/2016	13,260
8/31/2016	13,300
9/1/2016	13,269
9/2/2016	13,261
9/5/2016	13,197
9/6/2016	13,162



Tanggal	Kurs JISDOR
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9/8/2016	13,090
9/9/2016	13,089
9/13/2016	13,151
9/14/2016	13,228
9/15/2016	13,190
9/16/2016	13,131
9/19/2016	13,164
9/20/2016	13,142
9/21/2016	13,148
9/22/2016	13,098
9/23/2016	13,098
9/26/2016	13,076
9/27/2016	13,027
9/28/2016	12,926
9/29/2016	12,952
9/30/2016	12,998
10/3/2016	13,010
10/4/2016	12,988
10/5/2016	12,995
10/6/2016	12,992
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10/14/2016	13,047
10/17/2016	13,054
10/18/2016	13,044
10/19/2016	13,007
10/20/2016	12,999
10/21/2016	13,020
10/24/2016	13,047
10/25/2016	13,022
10/26/2016	12,997
10/27/2016	13,027
10/28/2016	13,048
10/31/2016	13,051
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11/7/2016	13,082
11/8/2016	13,090
11/9/2016	13,084
11/10/2016	13,118
11/11/2016	13,350
11/14/2016	13,358

Tanggal	Kurs JISDOR
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11/16/2016	13,347
11/17/2016	13,385
11/18/2016	13,408
11/21/2016	13,438
11/22/2016	13,424
11/23/2016	13,473
11/24/2016	13,540
11/25/2016	13,570
11/28/2016	13,467
11/29/2016	13,549
11/30/2016	13,563
12/1/2016	13,582
12/2/2016	13,524
12/5/2016	13,516
12/6/2016	13,405
12/7/2016	13,336
12/8/2016	13,304
12/9/2016	13,337
12/13/2016	13,309
12/14/2016	13,285
12/15/2016	13,367
12/16/2016	13,426
12/19/2016	13,381
12/20/2016	13,393
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12/22/2016	13,435
12/23/2016	13,470
12/27/2016	13,436
12/28/2016	13,447
12/29/2016	13,473
12/30/2016	13,436
1/3/2017	13,485
1/4/2017	13,478
1/5/2017	13,370
1/6/2017	13,347
1/9/2017	13,385
1/10/2017	13,320
1/11/2017	13,327
1/12/2017	13,288
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1/16/2017	13,354
1/17/2017	13,381
1/18/2017	13,328
1/19/2017	13,376
1/20/2017	13,382
1/23/2017	13,372
1/24/2017	13,330

Tanggal	Kurs JISDOR
1/25/2017	13,340
1/26/2017	13,325
1/27/2017	13,359
1/30/2017	13,335
1/31/2017	13,343
2/1/2017	13,349
2/2/2017	13,374
2/3/2017	13,362
2/6/2017	13,329
2/7/2017	13,322
2/8/2017	13,337
2/9/2017	13,308
2/10/2017	13,318
2/13/2017	13,330
2/14/2017	13,330
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2/20/2017	13,352
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3/1/2017	13,361
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3/14/2017	13,360
3/15/2017	13,375
3/16/2017	13,336
3/17/2017	13,342
3/20/2017	13,329
3/21/2017	13,308
3/22/2017	13,335
3/23/2017	13,332
3/24/2017	13,329
3/27/2017	13,314
3/29/2017	13,323
3/30/2017	13,316
3/31/2017	13,321
4/3/2017	13,324
4/4/2017	13,326



Tanggal	Kurs JISDOR
4/5/2017	13,329
4/6/2017	13,327
4/7/2017	13,341
4/10/2017	13,323
4/11/2017	13,282
4/12/2017	13,298
4/13/2017	13,264
4/17/2017	13,255
4/18/2017	13,299
4/20/2017	13,328
4/21/2017	13,320
4/25/2017	13,296
4/26/2017	13,278
4/27/2017	13,299
4/28/2017	13,327
5/2/2017	13,316
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6/13/2017	13,294
6/14/2017	13,286
6/15/2017	13,282
6/16/2017	13,298
6/19/2017	13,286
6/20/2017	13,297

Tanggal	Kurs JISDOR
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6/22/2017	13,319
7/3/2017	13,325
7/4/2017	13,386
7/5/2017	13,349
7/6/2017	13,364
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7/19/2017	13,304
7/20/2017	13,320
7/21/2017	13,323
7/24/2017	13,319
7/25/2017	13,320
7/26/2017	13,334
7/27/2017	13,315
7/28/2017	13,326
7/31/2017	13,323
8/1/2017	13,318
8/2/2017	13,331
8/3/2017	13,330
8/4/2017	13,324
8/7/2017	13,319
8/8/2017	13,319
8/9/2017	13,324
8/10/2017	13,338
8/11/2017	13,370
8/14/2017	13,344
8/15/2017	13,344
8/16/2017	13,374
8/18/2017	13,368
8/21/2017	13,355
8/22/2017	13,338
8/23/2017	13,342
8/24/2017	13,354
8/25/2017	13,348
8/28/2017	13,338
8/29/2017	13,348
8/30/2017	13,343
8/31/2017	13,351
9/4/2017	13,345
9/5/2017	13,336
9/6/2017	13,337

Tanggal	Kurs JISDOR
9/7/2017	13,331
9/8/2017	13,284
9/11/2017	13,154
9/12/2017	13,186
9/13/2017	13,209
9/14/2017	13,239
9/15/2017	13,261
9/18/2017	13,238
9/19/2017	13,258
9/20/2017	13,270
9/22/2017	13,325
9/25/2017	13,305
9/26/2017	13,348
9/27/2017	13,384
9/28/2017	13,464
9/29/2017	13,492
10/2/2017	13,499
10/3/2017	13,582
10/4/2017	13,489
10/5/2017	13,483
10/6/2017	13,485
10/9/2017	13,504
10/10/2017	13,491
10/11/2017	13,509
10/12/2017	13,521
10/13/2017	13,508
10/16/2017	13,483
10/17/2017	13,490
10/18/2017	13,514
10/19/2017	13,521
10/20/2017	13,517
10/23/2017	13,535
10/24/2017	13,529
10/25/2017	13,570
10/26/2017	13,560
10/27/2017	13,630
10/30/2017	13,580
10/31/2017	13,572
11/1/2017	13,592
11/2/2017	13,562
11/3/2017	13,500
11/6/2017	13,529
11/7/2017	13,504
11/8/2017	13,524
11/9/2017	13,514
11/10/2017	13,514
11/13/2017	13,555
11/14/2017	13,542



Tanggal	Kurs JISDOR
11/15/2017	13,539
11/16/2017	13,538
11/17/2017	13,517
11/20/2017	13,529
11/21/2017	13,544
11/22/2017	13,523
11/23/2017	13,503
11/24/2017	13,506
11/27/2017	13,511
11/28/2017	13,527
11/29/2017	13,515
11/30/2017	13,514
12/4/2017	13,527
12/5/2017	13,515
12/6/2017	13,524
12/7/2017	13,552
12/8/2017	13,556
12/11/2017	13,546
12/12/2017	13,550
12/13/2017	13,589
12/14/2017	13,565
12/15/2017	13,573
12/18/2017	13,584
12/19/2017	13,587
12/20/2017	13,579
12/21/2017	13,545
12/22/2017	13,558
12/27/2017	13,562
12/28/2017	13,560
12/29/2017	13,548
1/2/2018	13,542
1/3/2018	13,498
1/4/2018	13,474
1/5/2018	13,405
1/8/2018	13,397
1/9/2018	13,428
1/10/2018	13,449
1/11/2018	13,427
1/12/2018	13,362
1/15/2018	13,330
1/16/2018	13,333
1/17/2018	13,323
1/18/2018	13,365
1/19/2018	13,331
1/22/2018	13,334
1/23/2018	13,318
1/24/2018	13,321
1/25/2018	13,290

Tanggal	Kurs JISDOR
1/26/2018	13,303
1/29/2018	13,327
1/30/2018	13,398
1/31/2018	13,413
2/1/2018	13,402
2/2/2018	13,428
2/5/2018	13,498
2/6/2018	13,578
2/7/2018	13,533
2/8/2018	13,602
2/9/2018	13,643
2/12/2018	13,609
2/13/2018	13,644
2/14/2018	13,657
2/15/2018	13,570
2/19/2018	13,541
2/20/2018	13,573
2/21/2018	13,582
2/22/2018	13,665
2/23/2018	13,670
2/26/2018	13,659
2/27/2018	13,650
2/28/2018	13,707
3/1/2018	13,793
3/2/2018	13,746
3/5/2018	13,740
3/6/2018	13,750
3/7/2018	13,763
3/8/2018	13,774
3/9/2018	13,794
3/12/2018	13,768
3/13/2018	13,757
3/14/2018	13,739
3/15/2018	13,748
3/16/2018	13,765
3/19/2018	13,765
3/20/2018	13,761
3/21/2018	13,759
3/22/2018	13,737
3/23/2018	13,780
3/26/2018	13,776
3/27/2018	13,708
3/28/2018	13,745
3/29/2018	13,756
4/2/2018	13,750
4/3/2018	13,765
4/4/2018	13,760
4/5/2018	13,767

Tanggal	Kurs JISDOR
4/6/2018	13,771
4/9/2018	13,771
4/10/2018	13,759
4/11/2018	13,747
4/12/2018	13,763
4/13/2018	13,753
4/16/2018	13,766
4/17/2018	13,770
4/18/2018	13,770
4/19/2018	13,778
4/20/2018	13,804
4/23/2018	13,894
4/24/2018	13,900
4/25/2018	13,888
4/26/2018	13,930
4/27/2018	13,879
4/30/2018	13,877
5/2/2018	13,936
5/3/2018	13,965
5/4/2018	13,943
5/7/2018	13,956
5/8/2018	14,036
5/9/2018	14,074
5/11/2018	14,048
5/14/2018	13,976
5/15/2018	14,020
5/16/2018	14,094
5/17/2018	14,074
5/18/2018	14,107
5/21/2018	14,176
5/22/2018	14,178
5/23/2018	14,192
5/24/2018	14,205
5/25/2018	14,166
5/28/2018	14,065
5/30/2018	14,032
5/31/2018	13,951
6/4/2018	13,872
6/5/2018	13,887
6/6/2018	13,875
6/7/2018	13,868
6/8/2018	13,902
6/21/2018	14,090
6/22/2018	14,102
6/25/2018	14,105
6/26/2018	14,163
6/28/2018	14,271
6/29/2018	14,404



Tanggal	Kurs JISDOR
7/2/2018	14,331
7/3/2018	14,418
7/4/2018	14,343
7/5/2018	14,387
7/6/2018	14,409
7/9/2018	14,332
7/10/2018	14,326
7/11/2018	14,391
7/12/2018	14,435
7/13/2018	14,358
7/16/2018	14,396
7/17/2018	14,391
7/18/2018	14,406
7/19/2018	14,418
7/20/2018	14,520
7/23/2018	14,454
7/24/2018	14,541
7/25/2018	14,515
7/26/2018	14,443
7/27/2018	14,483
7/30/2018	14,409
7/31/2018	14,413
8/1/2018	14,442
8/2/2018	14,446
8/3/2018	14,503
8/6/2018	14,481
8/7/2018	14,485
8/8/2018	14,439
8/9/2018	14,422
8/10/2018	14,437
8/13/2018	14,583
8/14/2018	14,625
8/15/2018	14,621
8/16/2018	14,619
8/20/2018	14,578
8/21/2018	14,568
8/23/2018	14,620
8/24/2018	14,655
8/27/2018	14,610
8/28/2018	14,614
8/29/2018	14,643
8/30/2018	14,655
8/31/2018	14,711
9/3/2018	14,767
9/4/2018	14,840
9/5/2018	14,927
9/6/2018	14,891
9/7/2018	14,884

Tanggal	Kurs JISDOR
9/10/2018	14,835
9/12/2018	14,863
9/13/2018	14,794
9/14/2018	14,835
9/17/2018	14,859
9/18/2018	14,908
9/19/2018	14,896
9/20/2018	14,839
9/21/2018	14,824
9/24/2018	14,865
9/25/2018	14,893
9/26/2018	14,938
9/27/2018	14,919
9/28/2018	14,929
10/1/2018	14,905
10/2/2018	14,988
10/3/2018	15,088
10/4/2018	15,133
10/5/2018	15,182
10/8/2018	15,193
10/9/2018	15,233
10/10/2018	15,215
10/11/2018	15,253
10/12/2018	15,194
10/15/2018	15,246
10/16/2018	15,206
10/17/2018	15,178
10/18/2018	15,187
10/19/2018	15,221
10/22/2018	15,192
10/23/2018	15,208
10/24/2018	15,193
10/25/2018	15,210
10/26/2018	15,207
10/29/2018	15,218
10/30/2018	15,237
10/31/2018	15,227
11/1/2018	15,195
11/2/2018	15,089
11/5/2018	14,972
11/6/2018	14,891
11/7/2018	14,764
11/8/2018	14,651
11/9/2018	14,632
11/12/2018	14,747
11/13/2018	14,895
11/14/2018	14,755
11/15/2018	14,764

Tanggal	Kurs JISDOR
11/16/2018	14,594
11/19/2018	14,586
11/21/2018	14,618
11/22/2018	14,592
11/23/2018	14,552
11/26/2018	14,551
11/27/2018	14,504
11/28/2018	14,535
11/29/2018	14,408
11/30/2018	14,339
12/3/2018	14,252
12/4/2018	14,293
12/5/2018	14,383
12/6/2018	14,507
12/7/2018	14,539
12/10/2018	14,517
12/11/2018	14,613
12/12/2018	14,577
12/13/2018	14,536
12/14/2018	14,538
12/17/2018	14,617
12/18/2018	14,523
12/19/2018	14,380
12/20/2018	14,499
12/21/2018	14,480
12/26/2018	14,602
12/27/2018	14,563
12/28/2018	14,542
12/31/2018	14,481
1/2/2019	14,465
1/3/2019	14,474
1/4/2019	14,350
1/7/2019	14,105
1/8/2019	14,031
1/9/2019	14,120
1/10/2019	14,093
1/11/2019	14,076
1/14/2019	14,052
1/15/2019	14,084
1/16/2019	14,154
1/17/2019	14,158
1/18/2019	14,182
1/21/2019	14,212
1/22/2019	14,221
1/23/2019	14,188
1/24/2019	14,141
1/25/2019	14,163
1/28/2019	14,038



Tanggal	Kurs JISDOR
1/29/2019	14,098
1/30/2019	14,112
1/31/2019	14,072
2/1/2019	13,978
2/4/2019	13,976
2/6/2019	13,947
2/7/2019	13,978
2/8/2019	13,992
2/11/2019	13,995
2/12/2019	14,088
2/13/2019	14,027
2/14/2019	14,093
2/15/2019	14,116
2/18/2019	14,106
2/19/2019	14,119
2/20/2019	14,055
2/21/2019	14,057
2/22/2019	14,079
2/25/2019	14,007
2/26/2019	13,990
2/27/2019	14,004
2/28/2019	14,062
3/1/2019	14,111
3/4/2019	14,149
3/5/2019	14,146
3/6/2019	14,129
3/8/2019	14,223
3/11/2019	14,324
3/12/2019	14,251
3/13/2019	14,269
3/14/2019	14,253
3/15/2019	14,310
3/18/2019	14,242
3/19/2019	14,228
3/20/2019	14,231
3/21/2019	14,102
3/22/2019	14,157
3/25/2019	14,223
3/26/2019	14,171
3/27/2019	14,202
3/28/2019	14,255
3/29/2019	14,244
4/1/2019	14,231
4/2/2019	14,237
4/4/2019	14,182
4/5/2019	14,158
4/8/2019	14,145
4/9/2019	14,150

Tanggal	Kurs JISDOR
4/10/2019	14,155
4/11/2019	14,156
4/12/2019	14,153
4/15/2019	14,067
4/16/2019	14,066
4/18/2019	14,016
4/22/2019	14,056
4/23/2019	14,080
4/24/2019	14,112
4/25/2019	14,154
4/26/2019	14,188
4/29/2019	14,188
4/30/2019	14,215
5/2/2019	14,245
5/3/2019	14,282
5/6/2019	14,308
5/7/2019	14,309
5/8/2019	14,305
5/9/2019	14,338
5/10/2019	14,347
5/13/2019	14,362
5/14/2019	14,444
5/15/2019	14,448
5/16/2019	14,458
5/17/2019	14,469
5/20/2019	14,478
5/21/2019	14,462
5/22/2019	14,488
5/23/2019	14,513
5/24/2019	14,451
5/27/2019	14,360
5/28/2019	14,380
5/29/2019	14,417
5/31/2019	14,385
6/10/2019	14,231
6/11/2019	14,258
6/12/2019	14,234
6/13/2019	14,270
6/14/2019	14,304
6/17/2019	14,346
6/18/2019	14,334
6/19/2019	14,271
6/20/2019	14,236
6/21/2019	14,116
6/24/2019	14,165
6/25/2019	14,138
6/26/2019	14,174
6/27/2019	14,180

Tanggal	Kurs JISDOR
6/28/2019	14,141
7/1/2019	14,117
7/2/2019	14,140
7/3/2019	14,160
7/4/2019	14,106
7/5/2019	14,148
7/8/2019	14,147
7/9/2019	14,129
7/10/2019	14,152
7/11/2019	14,089
7/12/2019	14,085
7/15/2019	13,970
7/16/2019	13,925
7/17/2019	13,949
7/18/2019	13,976
7/19/2019	13,913
7/22/2019	13,963
7/23/2019	13,973
7/24/2019	14,011
7/25/2019	13,986
7/26/2019	14,001
7/29/2019	14,010
7/30/2019	14,034
7/31/2019	14,026
8/1/2019	14,098
8/2/2019	14,203
8/5/2019	14,231
8/6/2019	14,344
8/7/2019	14,275
8/8/2019	14,231
8/9/2019	14,195
8/12/2019	14,220
8/13/2019	14,283
8/14/2019	14,234
8/15/2019	14,296
8/16/2019	14,258
8/19/2019	14,203
8/20/2019	14,262
8/21/2019	14,259
8/22/2019	14,234
8/23/2019	14,249
8/26/2019	14,261
8/27/2019	14,235
8/28/2019	14,263
8/29/2019	14,254
8/30/2019	14,237
9/2/2019	14,190
9/3/2019	14,217



Tanggal	Kurs JISDOR
9/4/2019	14,218
9/5/2019	14,153
9/6/2019	14,140
9/9/2019	14,092
9/10/2019	14,031
9/11/2019	14,063
9/12/2019	14,052
9/13/2019	13,950
9/16/2019	14,020
9/17/2019	14,100
9/18/2019	14,080
9/19/2019	14,099
9/20/2019	14,085
9/23/2019	14,077
9/24/2019	14,099
9/25/2019	14,134
9/26/2019	14,162
9/27/2019	14,197
9/30/2019	14,174
10/1/2019	14,196

Tanggal	Kurs JISDOR
10/2/2019	14,207
10/3/2019	14,193
10/4/2019	14,135
10/7/2019	14,156
10/8/2019	14,170
10/9/2019	14,182
10/10/2019	14,157
10/11/2019	14,139
10/14/2019	14,126
10/15/2019	14,140
10/16/2019	14,187
10/17/2019	14,172
10/18/2019	14,140
10/21/2019	14,132
10/22/2019	14,058
10/23/2019	14,051
10/24/2019	13,996
10/25/2019	14,064
10/28/2019	14,023
10/29/2019	14,028

Tanggal	Kurs JISDOR
10/30/2019	14,044
10/31/2019	14,008
11/1/2019	14,066
11/4/2019	14,002
11/5/2019	14,031
11/6/2019	13,992
11/7/2019	14,040
11/8/2019	14,020
11/11/2019	14,040
11/12/2019	14,059
11/13/2019	14,082
11/14/2019	14,098
11/15/2019	14,069
11/18/2019	14,075
11/19/2019	14,091
11/20/2019	14,097
11/21/2019	14,112
11/22/2019	14,100
11/25/2019	14,091

Lampiran 2. Data Suku Bunga, Inflasi, dan Rasio Ekspor/Impor

Tanggal	Suku Bunga			Inflasi			Ekspor	Impor	Rasio Ekspor/ Impor
	Indo	US	Selisih	Indo	US	Selisih			
Jan-15	5.75	0.25	5.50	6.96	-0.09	7.04	13,244.88	12,612.65	1.050
Feb-15	6.00	0.25	5.75	6.29	-0.03	6.32	12,172.80	11,510.11	1.058
Mar-15	6.00	0.25	5.75	6.38	-0.07	6.46	13,634.04	12,608.69	1.081
Apr-15	6.00	0.25	5.75	6.79	-0.20	6.99	13,104.60	12,626.28	1.038
May-15	6.00	0.25	5.75	7.15	-0.04	7.19	12,754.66	11,613.59	1.098
Jun-15	6.00	0.25	5.75	7.26	0.12	7.13	13,514.10	12,978.09	1.041
Jul-15	6.00	0.25	5.75	7.26	0.17	7.09	11,465.78	10,081.86	1.137
Aug-15	6.00	0.25	5.75	7.18	0.20	6.98	12,726.04	12,399.25	1.026
Sep-15	6.00	0.25	5.75	6.83	-0.04	6.87	12,588.36	11,558.60	1.089
Oct-15	5.75	0.25	5.50	6.25	0.17	6.08	12,121.74	11,108.92	1.091
Nov-15	5.50	0.25	5.25	4.89	0.50	4.39	11,122.18	11,519.47	0.966
Dec-15	5.25	0.50	4.75	3.35	0.73	2.62	11,917.11	12,077.30	0.987
Jan-16	4.25	0.50	3.75	4.14	1.37	2.76	10,581.88	10,467.00	1.011
Feb-16	4.25	0.50	3.75	4.42	1.02	3.40	11,316.73	10,175.63	1.112
Mar-16	4.25	0.50	3.75	4.45	0.85	3.60	11,812.13	11,301.71	1.045
Apr-16	5.50	0.50	5.00	3.60	1.13	2.47	11,689.75	10,813.62	1.081
May-16	5.50	0.50	5.00	3.33	1.02	2.31	11,517.41	11,140.68	1.034
Jun-16	5.25	0.50	4.75	3.45	1.00	2.46	13,206.12	12,095.22	1.092
Jul-16	5.25	0.50	4.75	3.21	0.83	2.38	9,649.50	9,017.16	1.070
Aug-16	5.25	0.50	4.75	2.79	1.06	1.73	12,753.92	12,385.15	1.030
Sep-16	5.00	0.50	4.50	3.07	1.46	1.61	12,579.75	11,297.51	1.113
Oct-16	4.75	0.50	4.25	3.31	1.64	1.67	12,743.74	11,507.18	1.107
Nov-16	4.75	0.50	4.25	3.58	1.69	1.89	13,502.92	12,669.43	1.066
Dec-16	4.75	0.75	4.00	3.02	2.07	0.95	13,832.36	12,782.52	1.082
Jan-17	4.75	0.75	4.00	3.49	2.50	0.99	13,397.68	11,973.77	1.119



Tanggal	Suku Bunga			Inflasi			Ekspor	Impor	Rasio Ekspor/ Impor
	Indo	US	Selisih	Indo	US	Selisih			
Feb-17	4.75	0.75	4.00	3.83	2.74	1.09	12,615.98	11,359.41	1.111
Mar-17	4.75	1.00	3.75	3.61	2.38	1.23	14,718.48	13,283.19	1.108
Apr-17	4.75	1.00	3.75	4.17	2.20	1.97	13,269.69	11,950.61	1.110
May-17	4.75	1.00	3.75	4.33	1.87	2.46	14,333.86	13,772.55	1.041
Jun-17	4.75	1.25	3.50	4.37	1.63	2.74	11,661.38	9,991.57	1.167
Jul-17	4.75	1.25	3.50	3.88	1.73	2.15	13,611.06	13,889.81	0.980
Aug-17	4.50	1.25	3.25	3.82	1.94	1.88	15,187.99	13,509.20	1.124
Sep-17	4.25	1.25	3.00	3.72	2.23	1.49	14,580.22	12,788.29	1.140
Oct-17	4.25	1.25	3.00	3.58	2.04	1.54	15,252.56	14,249.18	1.070
Nov-17	4.25	1.25	3.00	3.30	2.20	1.10	15,334.74	15,113.52	1.015
Dec-17	4.25	1.50	2.75	3.61	2.11	1.50	14,864.55	15,104.47	0.984
Jan-18	4.25	1.50	2.75	3.25	2.07	1.18	14,576.28	15,309.43	0.952
Feb-18	4.25	1.50	2.75	3.18	2.21	0.97	14,132.38	14,185.49	0.996
Mar-18	4.25	1.75	2.50	3.40	2.36	1.04	15,510.62	14,463.60	1.072
Apr-18	4.25	1.75	2.50	3.41	2.46	0.95	14,496.24	16,162.29	0.897
May-18	4.75	1.75	3.00	3.23	2.80	0.43	16,198.34	17,662.89	0.917
Jun-18	5.25	2.00	3.25	3.12	2.87	0.25	12,941.74	11,267.89	1.149
Jul-18	5.25	2.00	3.25	3.18	2.95	0.24	16,284.72	18,297.15	0.890
Aug-18	5.50	2.00	3.50	3.20	2.70	0.50	15,865.12	16,818.14	0.943
Sep-18	5.75	2.25	3.50	2.88	2.28	0.61	14,956.35	14,610.06	1.024
Oct-18	5.75	2.25	3.50	3.16	2.52	0.64	15,909.07	17,667.62	0.900
Nov-18	6.00	2.50	3.50	3.23	2.18	1.05	14,851.72	16,901.81	0.879
Dec-18	6.00	2.50	3.50	3.13	1.91	1.22	14,290.09	15,364.99	0.930
Jan-19	6.00	2.50	3.50	2.82	1.55	1.27	13,927.88	14,991.41	0.929
Feb-19	6.00	2.50	3.50	2.57	1.52	1.05	12,555.90	12,226.01	1.027
Mar-19	6.00	2.50	3.50	2.48	1.86	0.62	14,121.92	13,451.11	1.050
Apr-19	6.00	2.50	3.50	2.83	2.00	0.84	13,113.62	15,399.19	0.852
May-19	6.00	2.50	3.50	3.32	1.79	1.53	14,825.18	14,606.66	1.015
Jun-19	6.00	2.50	3.50	3.28	1.65	1.63	11,792.73	11,495.39	1.026
Jul-19	5.75	2.25	3.50	3.32	1.81	1.51	15,454.19	15,518.48	0.996
Aug-19	5.50	2.25	3.25	3.49	1.75	1.74	14,281.72	14,169.35	1.008
Sep-19	5.25	2.00	3.25	3.39	1.71	1.68	14,099.53	14,263.45	0.989
Oct-19	5.00	1.75	3.25	3.13	1.80	1.33	14,931.62	14,759.08	1.012
Nov-19	5.00	1.75	3.25	3.00	2.10	0.90	13,947.62	15,340.47	0.909



Lampiran 3. Program

```
import numpy as np
import pandas as pd
import random
import matplotlib.pyplot as plt
from sklearn import preprocessing
from sklearn.model_selection import train_test_split
from sklearn.preprocessing import MinMaxScaler
import tensorflow as tf
from tensorflow import keras
from tensorflow.keras import layers
from tensorflow.python.keras.models import Sequential
from tensorflow.python.keras.layers import Dense
from tensorflow.python.keras.callbacks import EarlyStopping-ModelCheckpoint-
ReduceLROnPlateau
%matplotlib inline

#Memasukkan data
df = pd.read_csv('kurs_harian.csv')
df.set_index('Tanggal'-inplace=True)
df = df.values

#Memisahkan data sampel variabel input (x) dan output (y)
x = df[:, :len(df[0]), 1]
y = df[:, 0,1]
y = y.reshape(-1,1)

#Membagi data sampel untuk data latih dan data uji dengan masing-masing perbandingan
80:20
X_train, X_test, y_train, y_test = train_test_split(x, y, test_size=0.2, shuffle=False)

#Menormalisasi data dengan MinMaxScaler pada rentang [0.1, 0.99]
scalerX = MinMaxScaler(feature_range=(0.1,0.99)).fit(X_train)
scalery = MinMaxScaler(feature_range=(0.1,0.99)).fit(y_train)
X_train = scalerX.fit_transform(X_train)
y_train = scalery.fit_transform(y_train)
X_test = scalerX.transform(X_test)
y_test = scalery.transform(y_test)

#Inisialisasi fungsi error, leraning rate, maksimum iterasi
mse = tf.keras.losses.MeanSquaredError()
lr = tf.keras.optimizers.Adam(learning_rate=0.01)
max_iterasi = 500

# Proses Pelatihan
jl = 5 #jl: jumlah layer
```



```
a = [random.randint(2, 6) for i in range(jl)]
model = Sequential()

    #lapisan input dan lapisan tersembunyi
model.add(Dense(a[0], input_dim=len(df[0]), 1, activation='relu'))
model.add(Dense(a[1], activation='relu'))
model.add(Dense(a[2], activation='relu'))
model.add(Dense(a[3], activation='relu'))
model.add(Dense(a[4], activation='relu'))
model.add(Dense(a[5], activation='relu'))

    #lapisan output
model.add(Dense(1, activation='sigmoid'))
model.compile(loss='mse, optimizer='lr)
inisial_bobot = model.get_weights()

    # callbacks:
mcp_save = ModelCheckpoint('best_model.h5', save_best_only=True, monitor='loss',
mode='min')
earlyStopping = EarlyStopping(monitor='loss', patience=20, verbose=0, mode='min',
min_delta=1e-6)
history = model.fit(X_train, y_train, epochs=max_iterasi, verbose=2, batch_size=None,
callbacks=[earlyStopping, mcp_save])

# Grafik error pelatihan
print(history.history.keys())
plt.plot(history.history['loss'])
plt.title('model loss')
plt.ylabel('loss')
plt.xlabel('epoch')
plt.legend(['Train'], loc='upper left')
plt.show()

# Proses Pengujian
model.summary()
model.evaluate(X_test, y_test, verbose=1)
predik = model.predict(X_test)
# Grafik Hasil Prediksi dan Actual Target
plt.plot(y_test)
plt.plot(predik) # hasil prediksi tanpa save model rekonstruksi
plt.title('Hasil Prediksi')
plt.xlabel('Hari')
plt.legend(['Target', 'prediksi'], loc='upper right')
plt.show()
# Denormalisasi data
prediksi = scalery.inverse_transform(predik)
```



Lampiran 4. Bobot awal pelatihan data dengan arsitektur 6-3-7-6-3

- a. Bobot dari lapisan masukan ke lapisan tersembunyi ke-1
- | | | | | | | | |
|----|-------------|-------------|-------------|-------------|-------------|-------------|----|
| [[| 0.40461528 | 0.36015677 | -0.36731806 | 0.29217774 | -0.5319778 | -0.23911592 |] |
| [| -0.54057753 | -0.5196748 | 0.42028892 | 0.04996639 | 0.63828444 | 0.2317236 |] |
| [| -0.01689148 | -0.14765728 | 0.57586217 | -0.04752731 | 0.27785754 | -0.12449491 |] |
| [| 0.36944473 | 0.17198086 | 0.05445576 | -0.27912447 | -0.51869756 | 0.1468305 |] |
| [| -0.59293854 | 0.55619895 | -0.22494712 | 0.58618236 | 0.33734882 | 0.3427201 |] |
| [| 0.10281909 | -0.0233531 | -0.37360674 | -0.56525713 | 0.47299027 | -0.58419514 |] |
| [| -0.335744 | -0.2561914 | 0.24418604 | 0.4738692 | -0.17464969 | -0.34329912 |] |
| [| -0.23509243 | 0.1942209 | -0.32335004 | 0.07142121 | 0.35151887 | 0.28645003 |]] |
- b. Bobot dari lapisan tersembunyi ke-1 ke lapisan ke-2
- | | | | | |
|----|-------------|-------------|-------------|----|
| [[| -0.3637295 | -0.14053059 | 0.4085691 |] |
| [| -0.41261706 | -0.21774274 | -0.37018624 |] |
| [| -0.38540325 | 0.73992634 | -0.08047611 |] |
| [| 0.13997269 | -0.79370254 | 0.7224786 |] |
| [| 0.32458997 | -0.1223101 | 0.41866422 |] |
| [| -0.16664106 | -0.50580597 | -0.21132845 |]] |
- c. Bobot dari lapisan tersembunyi ke-2 ke lapisan ke-3
- | | | | | | | | | |
|----|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----|
| [[| -0.31549397 | -0.7456284 | -0.37013787 | -0.7175088 | 0.03913224 | -0.45334095 | 0.26996374 |] |
| [| 0.03933406 | 0.1271168 | 0.6057725 | -0.59226644 | -0.23882574 | -0.43027908 | -0.44968784 |] |
| [| 0.02462035 | -0.24076742 | -0.44368726 | 0.2762668 | 0.2158739 | 0.4562949 | 0.5515897 |]] |
- d. Bobot dari lapisan tersembunyi ke-3 ke lapisan ke-4
- | | | | | | | | |
|----|-------------|-------------|------------|-------------|-------------|-------------|----|
| [[| -0.35207197 | 0.36497533 | 0.08298063 | 0.31716555 | -0.66106546 | 0.4491037 |] |
| [| 0.38563108 | 0.5719669 | 0.18850201 | 0.40695262 | 0.6519036 | 0.01675826 |] |
| [| -0.5344069 | -0.663826 | 0.56549656 | -0.21800357 | -0.49963844 | 0.6612636 |] |
| [| 0.38791692 | -0.47584778 | 0.18952411 | 0.01272774 | 0.47155237 | -0.59593076 |] |
| [| 0.6346327 | 0.3961277 | -0.654972 | 0.21142262 | 0.02656353 | 0.08775938 |] |
| [| -0.10976458 | -0.2353417 | -0.3603158 | -0.19510975 | 0.43589973 | -0.45280623 |] |
| [| 0.37594116 | -0.54127 | 0.5455098 | 0.14580196 | 0.22777528 | -0.13734806 |]] |
- e. Bobot dari lapisan tersembunyi ke-4 ke lapisan ke-5
- | | | | | |
|----|-------------|-------------|------------|---|
| [[| 0.72287226 | -0.7836764 | 0.4401939 |] |
| [| -0.26045895 | 0.4800309 | 0.34763741 |] |
| [| -0.44742465 | -0.75487953 | -0.488105 |] |
| [| 0.1294986 | -0.18928015 | -0.4783204 |] |
| [| 0.4251517 | -0.17482352 | 0.5216371 |] |



- [-0.16985404 0.56531906 -0.42543945]]
 f. Bobot dari lapisan tersembunyi ke-5 ke lapisan keluaran
 [[0.23760903]
 [-0.70022327]
 [-1.2095877]]

Lampiran 5. Bobot dan bias hasil pelatihan data denagn arsitektur 6-3-7-6-3

- a. Bobot dari lapisan masukan ke lapisan tersembunyi ke-1
 [[0.40461528 0.3784649 -0.22307093 0.20490381 -0.61645097 -0.2343644]
 [-0.54057753 -0.5032053 0.5617235 -0.03655785 0.5559128 0.2364748]
 [-0.01689148 -0.15814142 0.66678005 -0.15116513 0.2181865 -0.16437437]
 [0.36944473 0.06315493 0.03375634 -0.3178277 -0.5015813 -0.07125246]
 [-0.59293854 1.2966269 0.32799137 -0.0016289 -0.41847813 0.31232992]
 [0.10281909 0.16805647 -0.17405646 -0.50233346 0.5878526 -0.7928509]
 [-0.335744 -0.02155903 0.2774336 0.56431884 -0.20973946 0.40042546]
 [-0.23509243 0.18856564 -0.200481 -0.12717375 0.43607593 -0.18243775]]
- b. Bias dari lapisan masukan ke lapisan tersembunyi ke-1
 [0. -0.35524818 -0.2084362 0.31973916 0.44579786 0.07877716]
- c. Bobot dari lapisan tersembunyi ke-1 ke lapisan ke-2
 [[-0.3637295 -0.14053059 0.4085691]
 [0.02411469 0.33564493 -0.84236264]
 [-1.0167164 0.70763576 0.04512721]
 [-0.4425312 -0.4755432 0.11301392]
 [0.5475641 0.28959733 0.4443808]
 [-0.10861298 -0.41522905 -0.16183104]]
- d. Bias dari lapisan tersembunyi ke-1 ke lapisan ke-2
 [0.02403807 -0.13251102 0.6034223]
- e. Bobot dari lapisan tersembunyi ke-2 ke lapisan ke-3
 [[-0.47581172 -0.7456284 -0.37013787 -0.17682926 0.36679226 -0.24096471 0.7110528]
 [-0.08172576 -0.00911003 0.4754147 -0.6651421 -0.0029263 -0.14864716 -0.1348924]
 [-0.11943226 -0.36119726 -1.0322369 0.33783332 0.57583785 0.8360619 0.9361795]]
- f. Bias dari lapisan tersembunyi ke-2 ke lapisan ke-3



- [0.0475904 -0.09654623 0.17980464 0.13747495 0.20008792 0.17644109 0.22922002]
- g. Bobot dari lapisan tersembunyi ke-3 ke lapisan ke-4
 [[-0.17341974 0.2908719 0.06314796 0.3636728 -0.54083943 0.4532049]
 [0.21664609 0.5719669 0.337312 0.40695262 0.47497892 0.18046653]
 [-0.5047737 -0.663826 0.94519496 -0.21800357 -0.38757095 0.7572554]
 [0.26927763 -0.47584778 0.23672262 0.05535327 0.35685948 -0.81510216]
 [0.8796124 0.3217941 -1.1039819 0.13031167 0.27392358 -0.15805508]
 [0.12355035 -0.30982867 -1.0041006 -0.19060867 0.6721149 -1.0018853]
 [0.7300791 -0.59007776 -0.18402447 0.06363109 0.5817484 -0.7198168]]
- h. Bias dari lapisan tersembunyi ke-3 ke lapisan ke-4
 [0.24823876 -0.07519289 -0.1128316 -0.09641206 0.22139531 0.12459911]
- i. Bobot dari lapisan tersembunyi ke-4 ke lapisan ke-5
 [[0.20436522 -0.91990185 0.67101365]
 [-0.20368879 0.4800309 0.2747012]
 [-0.5192134 -0.8262883 -1.0772551]
 [0.04851197 -0.18928015 -0.39353427]
 [-0.06252375 -0.2643996 0.7178858]
 [-0.15763201 0.4019856 -0.88047224]]
- j. Bias dari lapisan tersembunyi ke-4 ke lapisan ke-5
 [-0.2687054 -0.14859678 0.2522947]
- k. Bobot dari lapisan tersembunyi ke-5 ke lapisan keluaran
 [[0.00412443]
 [-0.5576361]
 [-1.3947749]]
- l. Bias dari lapisan tersembunyi ke-5 ke lapisan keluaran
 [2.76502]



Lampiran 6. Hasil normalisasi data sampel

Tanggal	Kurs ke t-5	Kurs ke t-4	Kurs ke t-3	Kurs ke t-2	Kurs ke t-1	Suku Bunga	Inflasi	Ekspor/ Impor	Kurs ke t
1/12/2015	0.1459	0.1678	0.1678	0.1912	0.1909	0.9699	0.9091	0.4021	0.1621
1/13/2015	0.1678	0.1678	0.1912	0.1909	0.1621	0.9699	0.9091	0.4021	0.1393
1/14/2015	0.1912	0.1912	0.1909	0.1621	0.1393	0.9699	0.9091	0.4021	0.1520
1/15/2015	0.1909	0.1909	0.1621	0.1393	0.1520	0.9699	0.9091	0.4021	0.1431
1/16/2015	0.1621	0.1621	0.1393	0.1520	0.1431	0.9699	0.9091	0.4021	0.1548
1/19/2015	0.1393	0.1393	0.1520	0.1431	0.1548	0.9699	0.9091	0.4021	0.1472
1/20/2015	0.1520	0.1520	0.1431	0.1548	0.1472	0.9699	0.9091	0.4021	0.1532
1/21/2015	0.1431	0.1431	0.1548	0.1472	0.1532	0.9699	0.9091	0.4021	0.1681
1/22/2015	0.1548	0.1548	0.1472	0.1532	0.1681	0.9699	0.9091	0.4021	0.1358
1/23/2015	0.1472	0.1472	0.1532	0.1681	0.1358	0.9699	0.9091	0.4021	0.1022
1/26/2015	0.1532	0.1532	0.1681	0.1358	0.1022	0.9699	0.9091	0.4021	0.1000
1/27/2015	0.1681	0.1681	0.1358	0.1022	0.1000	0.9699	0.9091	0.4021	0.1231
1/28/2015	0.1358	0.1358	0.1022	0.1000	0.1231	0.9699	0.9091	0.4021	0.1155
1/29/2015	0.1022	0.1022	0.1000	0.1231	0.1155	0.9699	0.9091	0.4021	0.1171
1/30/2015	0.1000	0.1000	0.1231	0.1155	0.1171	0.9699	0.9091	0.4021	0.1225
2/2/2015	0.1231	0.1231	0.1155	0.1171	0.1225	0.9699	0.9091	0.3809	0.1573
2/3/2015	0.1155	0.1155	0.1171	0.1225	0.1573	0.9699	0.9091	0.3809	0.1811
2/4/2015	0.1171	0.1171	0.1225	0.1573	0.1811	0.9699	0.9091	0.3809	0.1631
2/5/2015	0.1225	0.1225	0.1573	0.1811	0.1631	0.9699	0.9091	0.3809	0.1523
2/6/2015	0.1573	0.1573	0.1811	0.1631	0.1523	0.9699	0.9091	0.3809	0.1662
2/9/2015	0.1811	0.1811	0.1631	0.1523	0.1662	0.9699	0.9091	0.3809	0.1535
2/10/2015	0.1631	0.1631	0.1523	0.1662	0.1535	0.9699	0.9091	0.3809	0.1745
2/11/2015	0.1523	0.1523	0.1662	0.1535	0.1745	0.9699	0.9091	0.3809	0.1634
2/12/2015	0.1662	0.1662	0.1535	0.1745	0.1634	0.9699	0.9091	0.3809	0.1811
2/13/2015	0.1535	0.1535	0.1745	0.1634	0.1811	0.9699	0.9091	0.3809	0.2109
2/16/2015	0.1745	0.1745	0.1634	0.1811	0.2109	0.8658	0.9900	0.3809	0.2030
2/17/2015	0.1634	0.1634	0.1811	0.2109	0.2030	0.8658	0.9900	0.3809	0.1944
2/18/2015	0.1811	0.1811	0.2109	0.2030	0.1944	0.8658	0.9900	0.3809	0.1992
2/20/2015	0.2109	0.2109	0.2030	0.1944	0.1992	0.8658	0.9900	0.3809	0.2141
2/23/2015	0.2030	0.2030	0.1944	0.1992	0.2141	0.8658	0.9900	0.3809	0.2283
2/24/2015	0.1944	0.1944	0.1992	0.2141	0.2283	0.8658	0.9900	0.3809	0.2169
2/25/2015	0.1992	0.1992	0.2141	0.2283	0.2169	0.8658	0.9900	0.3809	0.2337
2/26/2015	0.2141	0.2141	0.2283	0.2169	0.2337	0.8658	0.9900	0.3809	0.2404
2/27/2015	0.2283	0.2283	0.2169	0.2337	0.2404	0.8658	0.9900	0.3809	0.2324
3/2/2015	0.2169	0.2169	0.2337	0.2404	0.2324	0.8658	0.9900	0.3152	0.2328
3/3/2015	0.2337	0.2337	0.2404	0.2324	0.2328	0.8658	0.9900	0.3152	0.2739
3/4/2015	0.2404	0.2404	0.2324	0.2328	0.2739	0.8658	0.9900	0.3152	0.2641
3/5/2015	0.2324	0.2324	0.2328	0.2739	0.2641	0.8658	0.9900	0.3152	0.2644
3/12/2015	0.2831	0.2831	0.2708	0.2911	0.2949	0.8658	0.9900	0.3152	0.3281
3/13/2015	0.2708	0.2708	0.2911	0.2949	0.3281	0.8658	0.9900	0.3152	0.3319
3/16/2015	0.2911	0.2911	0.2949	0.3281	0.3319	0.8658	0.9900	0.3152	0.3367
3/17/2015	0.2949	0.2949	0.3281	0.3319	0.3367	0.8658	0.9900	0.3152	0.3513
3/18/2015	0.3281	0.3281	0.3319	0.3367	0.3513	0.8658	0.9900	0.3152	0.3424
3/19/2015	0.3319	0.3319	0.3367	0.3513	0.3424	0.8658	0.9900	0.3152	0.3281
3/20/2015	0.3367	0.3367	0.3513	0.3424	0.3281	0.8658	0.9900	0.3152	0.2787
3/23/2015	0.3513	0.3513	0.3424	0.3281	0.2787	0.8658	0.9900	0.3152	0.2999
3/24/2015	0.3424	0.3424	0.3281	0.2787	0.2999	0.8658	0.9900	0.3152	0.3002
3/25/2015	0.3281	0.3281	0.2787	0.2999	0.3002	0.8658	0.9900	0.3152	0.2673
3/26/2015	0.2787	0.2787	0.2999	0.3002	0.2673	0.8658	0.9900	0.3152	0.2546
3/27/2015	0.2999	0.2999	0.3002	0.2673	0.2546	0.8861	0.9900	0.3152	0.2771
3/30/2015	0.3002	0.3002	0.2673	0.2546	0.2771	0.8861	0.9900	0.3152	0.2964
3/31/2015	0.2673	0.2673	0.2546	0.2771	0.2964	0.8861	0.9900	0.3152	0.3034
4/1/2015	0.2546	0.2546	0.2771	0.2964	0.3034	0.8861	0.9900	0.4376	0.3028
4/2/2015	0.2771	0.2771	0.2964	0.3034	0.3028	0.8861	0.9900	0.4376	0.2898
4/6/2015	0.2964	0.2964	0.3034	0.3028	0.2898	0.8861	0.9900	0.4376	0.2762



4/7/2015	0.3034	0.3034	0.3028	0.2898	0.2762	0.8861	0.9900	0.4376	0.2578
4/8/2015	0.3028	0.3028	0.2898	0.2762	0.2578	0.8861	0.9900	0.4376	0.2705
4/9/2015	0.2898	0.2898	0.2762	0.2578	0.2705	0.8861	0.9900	0.4376	0.2768
4/10/2015	0.2762	0.2762	0.2578	0.2705	0.2768	0.8861	0.9900	0.4376	0.2676
4/13/2015	0.2578	0.2578	0.2705	0.2768	0.2676	0.8861	0.9900	0.4376	0.2476
4/14/2015	0.2705	0.2705	0.2768	0.2676	0.2476	0.8861	0.9900	0.4376	0.2587
4/15/2015	0.2768	0.2768	0.2676	0.2476	0.2587	0.8861	0.9900	0.4376	0.2695
4/16/2015	0.2676	0.2676	0.2476	0.2587	0.2695	0.8861	0.9900	0.4376	0.2686
4/17/2015	0.2476	0.2476	0.2587	0.2695	0.2686	0.8861	0.9900	0.4376	0.2248
4/20/2015	0.2587	0.2587	0.2695	0.2686	0.2248	0.8861	0.9900	0.4376	0.2328
4/21/2015	0.2695	0.2695	0.2686	0.2248	0.2328	0.8861	0.9900	0.4376	0.2366
4/22/2015	0.2686	0.2686	0.2248	0.2328	0.2366	0.8861	0.9900	0.4376	0.2578
4/23/2015	0.2248	0.2248	0.2328	0.2366	0.2578	0.8861	0.9900	0.4376	0.2610
4/24/2015	0.2328	0.2328	0.2366	0.2578	0.2610	0.8861	0.9900	0.4376	0.2568
4/27/2015	0.2366	0.2366	0.2578	0.2610	0.2568	0.8861	0.9900	0.4376	0.2575
4/28/2015	0.2578	0.2578	0.2610	0.2568	0.2575	0.8861	0.9900	0.4376	0.2514
4/29/2015	0.2610	0.2610	0.2568	0.2575	0.2514	0.8861	0.9900	0.4376	0.2692
4/30/2015	0.2568	0.2568	0.2575	0.2514	0.2692	0.8861	0.9900	0.4376	0.2648
5/4/2015	0.2575	0.2575	0.2514	0.2692	0.2648	0.8861	0.9900	0.2700	0.2562
5/5/2015	0.2514	0.2514	0.2692	0.2648	0.2562	0.8861	0.9900	0.2700	0.2828
5/6/2015	0.2692	0.2692	0.2648	0.2562	0.2828	0.8861	0.9900	0.2700	0.2739
5/7/2015	0.2648	0.2648	0.2562	0.2828	0.2739	0.8861	0.9900	0.2700	0.2888
5/8/2015	0.2562	0.2562	0.2828	0.2739	0.2888	0.8861	0.9900	0.2700	0.2968
5/11/2015	0.2828	0.2828	0.2739	0.2888	0.2968	0.8861	0.9900	0.2700	0.3322
5/12/2015	0.2739	0.2739	0.2888	0.2968	0.3322	0.8861	0.9900	0.2700	0.3129
5/13/2015	0.2888	0.2888	0.2968	0.3322	0.3129	0.9619	0.9900	0.2700	0.3405
5/15/2015	0.2968	0.2968	0.3322	0.3129	0.3405	0.9619	0.9900	0.2700	0.3357
5/18/2015	0.3322	0.3322	0.3129	0.3405	0.3357	0.9619	0.9900	0.2700	0.3047
5/19/2015	0.3129	0.3129	0.3405	0.3357	0.3047	0.9619	0.9900	0.2700	0.3129
5/20/2015	0.3405	0.3405	0.3357	0.3047	0.3129	0.9619	0.9900	0.2700	0.3341
5/21/2015	0.3357	0.3357	0.3047	0.3129	0.3341	0.9619	0.9900	0.2700	0.3297
5/22/2015	0.3047	0.3047	0.3129	0.3341	0.3297	0.9619	0.9900	0.2700	0.3237
5/25/2015	0.3129	0.3129	0.3341	0.3297	0.3237	0.9619	0.9900	0.2700	0.3193
5/26/2015	0.3341	0.3341	0.3297	0.3237	0.3193	0.9619	0.9900	0.2700	0.3351
5/27/2015	0.3297	0.3297	0.3237	0.3193	0.3351	0.9619	0.9900	0.2700	0.3370
5/28/2015	0.3237	0.3237	0.3193	0.3351	0.3370	0.9619	0.9900	0.2700	0.3487
5/29/2015	0.3193	0.3193	0.3351	0.3370	0.3487	0.9619	0.9900	0.2700	0.3411
6/1/2015	0.3351	0.3351	0.3370	0.3487	0.3411	0.9619	0.9900	0.4276	0.3430
6/3/2015	0.3370	0.3370	0.3487	0.3411	0.3430	0.9619	0.9900	0.4276	0.3490
6/4/2015	0.3487	0.3487	0.3411	0.3430	0.3490	0.9619	0.9900	0.4276	0.3383
6/5/2015	0.3411	0.3411	0.3430	0.3490	0.3383	0.9619	0.9900	0.4276	0.3532
6/8/2015	0.3430	0.3430	0.3490	0.3383	0.3532	0.9619	0.9900	0.4276	0.3674
6/9/2015	0.3490	0.3490	0.3383	0.3532	0.3674	0.9619	0.9900	0.4276	0.3902
6/10/2015	0.3383	0.3383	0.3532	0.3674	0.3902	0.9619	0.9900	0.4276	0.3909
6/11/2015	0.3532	0.3532	0.3674	0.3902	0.3909	0.9619	0.9900	0.4276	0.3804
6/12/2015	0.3674	0.3674	0.3902	0.3909	0.3804	0.9619	0.9900	0.4276	0.3687
6/15/2015	0.3902	0.3902	0.3909	0.3804	0.3687	0.9619	0.9900	0.4276	0.3766
6/16/2015	0.3909	0.3909	0.3804	0.3687	0.3766	0.9619	0.9900	0.4276	0.3817
6/22/2015	0.3817	0.3817	0.3817	0.3924	0.3842	0.9619	0.9900	0.4276	0.3788
6/23/2015	0.3817	0.3817	0.3924	0.3842	0.3788	0.9619	0.9900	0.4276	0.3769
6/24/2015	0.3924	0.3924	0.3842	0.3788	0.3769	0.9619	0.9900	0.4276	0.3763
6/25/2015	0.3842	0.3842	0.3788	0.3769	0.3763	0.9619	0.9900	0.4276	0.3649
6/26/2015	0.3788	0.3788	0.3769	0.3763	0.3649	0.9900	0.9900	0.4276	0.3785
6/29/2015	0.3769	0.3769	0.3763	0.3649	0.3785	0.9900	0.9900	0.4276	0.3833
6/30/2015	0.3763	0.3763	0.3649	0.3785	0.3833	0.9900	0.9900	0.4276	0.3890



7/1/2015	0.3649	0.3649	0.3785	0.3833	0.3890	0.9900	0.9900	0.1712	0.3814
7/2/2015	0.3785	0.3785	0.3833	0.3890	0.3814	0.9900	0.9900	0.1712	0.3810
7/3/2015	0.3833	0.3833	0.3890	0.3814	0.3810	0.9900	0.9900	0.1712	0.3829
7/6/2015	0.3890	0.3890	0.3814	0.3810	0.3829	0.9900	0.9900	0.1712	0.3763
7/7/2015	0.3814	0.3814	0.3810	0.3829	0.3763	0.9900	0.9900	0.1712	0.3880
7/8/2015	0.3810	0.3810	0.3829	0.3763	0.3880	0.9900	0.9900	0.1712	0.3753
7/9/2015	0.3829	0.3829	0.3763	0.3880	0.3753	0.9900	0.9900	0.1712	0.3858
7/10/2015	0.3763	0.3763	0.3880	0.3753	0.3858	0.9900	0.9900	0.1712	0.3861
7/13/2015	0.3880	0.3880	0.3753	0.3858	0.3861	0.9900	0.9900	0.1712	0.3725
7/14/2015	0.3753	0.3753	0.3858	0.3861	0.3725	0.9900	0.9900	0.1712	0.3741
7/15/2015	0.3858	0.3858	0.3861	0.3725	0.3741	0.9900	0.9900	0.1712	0.3776
7/22/2015	0.3861	0.3861	0.3725	0.3741	0.3776	0.9900	0.9900	0.1712	0.3804
7/23/2015	0.3725	0.3725	0.3741	0.3776	0.3804	0.9900	0.9900	0.1712	0.3928
7/24/2015	0.3741	0.3741	0.3776	0.3804	0.3928	0.9900	0.9900	0.1712	0.4010
7/27/2015	0.3776	0.3776	0.3804	0.3928	0.4010	0.9900	0.9900	0.1712	0.4181
7/28/2015	0.3804	0.3804	0.3928	0.4010	0.4181	0.9900	0.9900	0.1712	0.4197
7/29/2015	0.3928	0.3928	0.4010	0.4181	0.4197	0.9900	0.9900	0.1712	0.4219
7/30/2015	0.4010	0.4010	0.4181	0.4197	0.4219	0.9900	0.9900	0.1712	0.4168
7/31/2015	0.4181	0.4181	0.4197	0.4219	0.4168	0.9900	0.9900	0.1712	0.4244
8/3/2015	0.4197	0.4197	0.4219	0.4168	0.4244	0.9900	0.9900	0.4719	0.4286
8/4/2015	0.4219	0.4219	0.4168	0.4244	0.4286	0.9900	0.9900	0.4719	0.4320
8/5/2015	0.4168	0.4168	0.4244	0.4286	0.4320	0.9900	0.9900	0.4719	0.4330
8/6/2015	0.4244	0.4244	0.4286	0.4320	0.4330	0.9900	0.9900	0.4719	0.4400
8/7/2015	0.4286	0.4286	0.4320	0.4330	0.4400	0.9900	0.9900	0.4719	0.4438
8/10/2015	0.4320	0.4320	0.4330	0.4400	0.4438	0.9900	0.9900	0.4719	0.4460
8/11/2015	0.4330	0.4330	0.4400	0.4438	0.4460	0.9900	0.9900	0.4719	0.4460
8/12/2015	0.4400	0.4400	0.4438	0.4460	0.4460	0.9900	0.9900	0.4719	0.4476
8/13/2015	0.4438	0.4438	0.4460	0.4460	0.4476	0.9900	0.9900	0.4719	0.5163
8/14/2015	0.4460	0.4460	0.4460	0.4476	0.5163	0.9827	0.9900	0.4719	0.5128
8/18/2015	0.4460	0.4460	0.4476	0.5163	0.5128	0.9827	0.9900	0.4719	0.5179
8/19/2015	0.4476	0.4476	0.5163	0.5128	0.5179	0.9827	0.9900	0.4719	0.5395
8/20/2015	0.5163	0.5163	0.5128	0.5179	0.5395	0.9827	0.9900	0.4719	0.5372
8/21/2015	0.5128	0.5128	0.5179	0.5395	0.5372	0.9827	0.9900	0.4719	0.5417
8/24/2015	0.5179	0.5179	0.5395	0.5372	0.5417	0.9827	0.9900	0.4719	0.5597
8/25/2015	0.5395	0.5395	0.5372	0.5417	0.5597	0.9827	0.9900	0.4719	0.5924
8/26/2015	0.5372	0.5372	0.5417	0.5597	0.5924	0.9827	0.9900	0.4719	0.6142
8/27/2015	0.5417	0.5417	0.5597	0.5924	0.6142	0.9827	0.9900	0.4719	0.6253
8/28/2015	0.5597	0.5597	0.5924	0.6142	0.6253	0.9827	0.9900	0.4719	0.6336
8/31/2015	0.5924	0.5924	0.6142	0.6253	0.6336	0.9827	0.9900	0.4719	0.5965
9/1/2015	0.6142	0.6142	0.6253	0.6336	0.5965	0.9827	0.9900	0.2943	0.6016
9/2/2015	0.6253	0.6253	0.6336	0.5965	0.6016	0.9827	0.9900	0.2943	0.6187
9/3/2015	0.6336	0.6336	0.5965	0.6016	0.6187	0.9827	0.9900	0.2943	0.6332
9/4/2015	0.5965	0.5965	0.6016	0.6187	0.6332	0.9827	0.9900	0.2943	0.6437
9/7/2015	0.6016	0.6016	0.6187	0.6332	0.6437	0.9827	0.9900	0.2943	0.6494
9/8/2015	0.6187	0.6187	0.6332	0.6437	0.6494	0.9827	0.9900	0.2943	0.6671
9/9/2015	0.6332	0.6332	0.6437	0.6494	0.6671	0.9827	0.9900	0.2943	0.6833
9/10/2015	0.6437	0.6437	0.6494	0.6671	0.6833	0.9827	0.9900	0.2943	0.6703
9/11/2015	0.6494	0.6494	0.6671	0.6833	0.6703	0.9827	0.9900	0.2943	0.6950
9/14/2015	0.6671	0.6671	0.6833	0.6703	0.6950	0.9827	0.9900	0.2943	0.6900
9/15/2015	0.6833	0.6833	0.6703	0.6950	0.6900	0.9827	0.9900	0.2943	0.6950
9/16/2015	0.6703	0.6703	0.6950	0.6900	0.6950	0.9827	0.9900	0.2943	0.7105
9/17/2015	0.6950	0.6950	0.6900	0.6950	0.7105	0.9827	0.9900	0.2943	0.7330
9/18/2015	0.6900	0.6900	0.6950	0.7105	0.7330	0.9827	0.9900	0.2943	0.7362
9/21/2015	0.6950	0.6950	0.7105	0.7330	0.7362	0.9827	0.9900	0.2943	0.7397
9/22/2015	0.7105	0.7105	0.7330	0.7362	0.7397	0.9827	0.9900	0.2943	0.7359



9/23/2015	0.7330	0.7330	0.7362	0.7397	0.7359	0.9827	0.9900	0.2943	0.7470
9/25/2015	0.7362	0.7362	0.7397	0.7359	0.7470	0.9827	0.9900	0.2943	0.7904
9/28/2015	0.7397	0.7397	0.7359	0.7470	0.7904	0.9827	0.9900	0.2943	0.8116
9/29/2015	0.7359	0.7359	0.7470	0.7904	0.8116	0.9767	0.9900	0.2943	0.8135
9/30/2015	0.7470	0.7470	0.7904	0.8116	0.8135	0.9767	0.9900	0.2943	0.8237
10/1/2015	0.7904	0.7904	0.8116	0.8135	0.8237	0.9767	0.9900	0.2887	0.8012
10/2/2015	0.8116	0.8116	0.8135	0.8237	0.8012	0.9767	0.9900	0.2887	0.8002
10/5/2015	0.8135	0.8135	0.8237	0.8012	0.8002	0.9767	0.9900	0.2887	0.8176
10/6/2015	0.8237	0.8237	0.8012	0.8002	0.8176	0.9767	0.9900	0.2887	0.7844
10/12/2015	0.7844	0.7844	0.7140	0.6136	0.5325	0.9767	0.9900	0.2887	0.4412
10/13/2015	0.7140	0.7140	0.6136	0.5325	0.4412	0.9767	0.9900	0.2887	0.4238
10/15/2015	0.6136	0.6136	0.5325	0.4412	0.4238	0.9767	0.9900	0.2887	0.4526
10/16/2015	0.5325	0.5325	0.4412	0.4238	0.4526	0.9767	0.9900	0.2887	0.3674
10/19/2015	0.4412	0.4412	0.4238	0.4526	0.3674	0.9767	0.9900	0.2887	0.4454
10/20/2015	0.4238	0.4238	0.4526	0.3674	0.4454	0.9767	0.9900	0.2887	0.4545
10/21/2015	0.4526	0.4526	0.3674	0.4454	0.4545	0.9767	0.9900	0.2887	0.4770
10/22/2015	0.3674	0.3674	0.4454	0.4545	0.4770	0.9767	0.9900	0.2887	0.4967
10/23/2015	0.4454	0.4454	0.4545	0.4770	0.4967	0.9767	0.9900	0.2887	0.4789
10/26/2015	0.4545	0.4545	0.4770	0.4967	0.4789	0.9767	0.9900	0.2887	0.4317
10/27/2015	0.4770	0.4770	0.4967	0.4789	0.4317	0.9767	0.9900	0.2887	0.4799
10/28/2015	0.4967	0.4967	0.4789	0.4317	0.4799	0.9767	0.9900	0.2887	0.4745
10/29/2015	0.4789	0.4789	0.4317	0.4799	0.4745	0.9767	0.9900	0.2887	0.4758
10/30/2015	0.4317	0.4317	0.4799	0.4745	0.4758	0.9767	0.9900	0.2887	0.4542
11/2/2015	0.4799	0.4799	0.4745	0.4758	0.4542	0.9767	0.9900	0.6662	0.4786
11/3/2015	0.4745	0.4745	0.4758	0.4542	0.4786	0.9767	0.9900	0.6662	0.4922
11/4/2015	0.4758	0.4758	0.4542	0.4786	0.4922	0.9767	0.9900	0.6662	0.4644
11/5/2015	0.4542	0.4542	0.4786	0.4922	0.4644	0.9767	0.9900	0.6662	0.4222
11/6/2015	0.4786	0.4786	0.4922	0.4644	0.4222	0.9767	0.9900	0.6662	0.4672
11/9/2015	0.4922	0.4922	0.4644	0.4222	0.4672	0.9767	0.9900	0.6662	0.4504
11/10/2015	0.4644	0.4644	0.4222	0.4672	0.4504	0.9767	0.9900	0.6662	0.4938
11/11/2015	0.4222	0.4222	0.4672	0.4504	0.4938	0.9767	0.9900	0.6662	0.4723
11/12/2015	0.4672	0.4672	0.4504	0.4938	0.4723	0.9607	0.9900	0.6662	0.4587
11/13/2015	0.4504	0.4504	0.4938	0.4723	0.4587	0.9607	0.9900	0.6662	0.4583
11/16/2015	0.4938	0.4938	0.4723	0.4587	0.4583	0.9607	0.9900	0.6662	0.4767
11/17/2015	0.4723	0.4723	0.4587	0.4583	0.4767	0.9607	0.9900	0.6662	0.5081
11/18/2015	0.4587	0.4587	0.4583	0.4767	0.5081	0.9607	0.9900	0.6662	0.5014
11/19/2015	0.4583	0.4583	0.4767	0.5081	0.5014	0.9607	0.9900	0.6662	0.5179
11/20/2015	0.4767	0.4767	0.5081	0.5014	0.5179	0.9607	0.9900	0.6662	0.5255
11/23/2015	0.5081	0.5081	0.5014	0.5179	0.5255	0.9607	0.9900	0.6662	0.5103
11/24/2015	0.5014	0.5014	0.5179	0.5255	0.5103	0.9607	0.9900	0.6662	0.4967
11/30/2015	0.4967	0.4967	0.5052	0.4894	0.5084	0.9607	0.9900	0.6662	0.5128
12/1/2015	0.5052	0.5052	0.4894	0.5084	0.5128	0.9607	0.9900	0.5957	0.5423
12/2/2015	0.4894	0.4894	0.5084	0.5128	0.5423	0.9607	0.9900	0.5957	0.5322
12/3/2015	0.5084	0.5084	0.5128	0.5423	0.5322	0.9607	0.9900	0.5957	0.5160
12/4/2015	0.5128	0.5128	0.5423	0.5322	0.5160	0.9607	0.9900	0.5957	0.5439
12/7/2015	0.5423	0.5423	0.5322	0.5160	0.5439	0.9607	0.9900	0.5957	0.5401
12/8/2015	0.5322	0.5322	0.5160	0.5439	0.5401	0.9607	0.9900	0.5957	0.5414
12/10/2015	0.5160	0.5160	0.5439	0.5401	0.5414	0.9607	0.9900	0.5957	0.5464
12/11/2015	0.5439	0.5439	0.5401	0.5414	0.5464	0.9607	0.9900	0.5957	0.5784
12/14/2015	0.5401	0.5401	0.5414	0.5464	0.5784	0.9607	0.9900	0.5957	0.5730
12/15/2015	0.5414	0.5414	0.5464	0.5784	0.5730	0.9607	0.9900	0.5957	0.6171
12/16/2015	0.5464	0.5464	0.5784	0.5730	0.6171	0.9607	0.9900	0.5957	0.6136
12/17/2015	0.5784	0.5784	0.5730	0.6171	0.6136	0.9607	0.9900	0.5957	0.6088
12/18/2015	0.5730	0.5730	0.6171	0.6136	0.6088	0.9607	0.9900	0.5957	0.6019
12/21/2015	0.6171	0.6171	0.6136	0.6088	0.6019	0.9607	0.9900	0.5957	0.6031



12/22/2015	0.6136	0.6136	0.6088	0.6019	0.6031	0.9607	0.9900	0.5957	0.5524
12/23/2015	0.6088	0.6088	0.6019	0.6031	0.5524	0.9607	0.9900	0.5957	0.4710
12/28/2015	0.6019	0.6019	0.6031	0.5524	0.4710	0.9607	0.9900	0.5957	0.4802
12/29/2015	0.6031	0.6031	0.5524	0.4710	0.4802	0.9607	0.9900	0.5957	0.4786
12/30/2015	0.5524	0.5524	0.4710	0.4802	0.4786	0.9445	0.9900	0.5957	0.4846
12/31/2015	0.4710	0.4710	0.4802	0.4786	0.4846	0.9445	0.9900	0.5957	0.5277
1/4/2016	0.4802	0.4802	0.4786	0.4846	0.5277	0.9445	0.9900	0.5188	0.5280
1/5/2016	0.4786	0.4786	0.4846	0.5277	0.5280	0.9445	0.9900	0.5188	0.5607
1/6/2016	0.4846	0.4846	0.5277	0.5280	0.5607	0.9445	0.9900	0.5188	0.5711
1/7/2016	0.5277	0.5277	0.5280	0.5607	0.5711	0.9445	0.9900	0.5188	0.5496
1/8/2016	0.5280	0.5280	0.5607	0.5711	0.5496	0.9445	0.9900	0.5188	0.5759
1/11/2016	0.5607	0.5607	0.5711	0.5496	0.5759	0.9445	0.9900	0.5188	0.5531
1/12/2016	0.5711	0.5711	0.5496	0.5759	0.5531	0.9445	0.9900	0.5188	0.5724
1/13/2016	0.5496	0.5496	0.5759	0.5531	0.5724	0.9445	0.9900	0.5188	0.5407
1/14/2016	0.5759	0.5759	0.5531	0.5724	0.5407	0.9445	0.9900	0.5188	0.5490
1/15/2016	0.5531	0.5531	0.5724	0.5407	0.5490	0.9445	0.9900	0.5188	0.5540
1/18/2016	0.5724	0.5724	0.5407	0.5490	0.5540	0.9445	0.9900	0.5188	0.5569
1/19/2016	0.5407	0.5407	0.5490	0.5540	0.5569	0.9445	0.9900	0.5188	0.5711
1/20/2016	0.5490	0.5490	0.5540	0.5569	0.5711	0.9445	0.9900	0.5188	0.5680
1/21/2016	0.5540	0.5540	0.5569	0.5711	0.5680	0.9445	0.9900	0.5188	0.5600
1/22/2016	0.5569	0.5569	0.5711	0.5680	0.5600	0.9445	0.9900	0.5188	0.5610
1/25/2016	0.5711	0.5711	0.5680	0.5600	0.5610	0.9445	0.9900	0.5188	0.5531
1/26/2016	0.5680	0.5680	0.5600	0.5610	0.5531	0.9445	0.9900	0.5188	0.5436
1/27/2016	0.5600	0.5600	0.5610	0.5531	0.5436	0.9445	0.9900	0.5188	0.5626
1/28/2016	0.5610	0.5610	0.5531	0.5436	0.5626	0.9445	0.9900	0.5188	0.5521
1/29/2016	0.5531	0.5531	0.5436	0.5626	0.5521	0.9445	0.9900	0.5188	0.5578
2/1/2016	0.5436	0.5436	0.5626	0.5521	0.5578	0.9445	0.9900	0.2341	0.5442
2/2/2016	0.5626	0.5626	0.5521	0.5578	0.5442	0.9445	0.9900	0.2341	0.4976
2/3/2016	0.5521	0.5521	0.5578	0.5442	0.4976	0.9445	0.9900	0.2341	0.4729
2/4/2016	0.5578	0.5578	0.5442	0.4976	0.4729	0.9445	0.9900	0.2341	0.5160
2/5/2016	0.5442	0.5442	0.4976	0.4729	0.5160	0.9445	0.9900	0.2341	0.4859
2/9/2016	0.4976	0.4976	0.4729	0.5160	0.4859	0.9445	0.9900	0.2341	0.4831
2/10/2016	0.4729	0.4729	0.5160	0.4859	0.4831	0.9445	0.9900	0.2341	0.4945
2/11/2016	0.5160	0.5160	0.4859	0.4831	0.4945	0.9445	0.9900	0.2341	0.4466
2/12/2016	0.4859	0.4859	0.4831	0.4945	0.4466	0.8319	0.9091	0.2341	0.3931
2/15/2016	0.4831	0.4831	0.4945	0.4466	0.3931	0.8319	0.9091	0.2341	0.4254
2/16/2016	0.4945	0.4945	0.4466	0.3931	0.4254	0.8319	0.9091	0.2341	0.4270
2/17/2016	0.4466	0.4466	0.3931	0.4254	0.4270	0.8319	0.9091	0.2341	0.3817
2/18/2016	0.3931	0.3931	0.4254	0.4270	0.3817	0.8319	0.9091	0.2341	0.4358
2/19/2016	0.4254	0.4254	0.4270	0.3817	0.4358	0.8319	0.9091	0.2341	0.4279
2/22/2016	0.4270	0.4270	0.3817	0.4358	0.4279	0.8319	0.9091	0.2341	0.4501
2/23/2016	0.3817	0.3817	0.4358	0.4279	0.4501	0.8319	0.9091	0.2341	0.4219
2/24/2016	0.4358	0.4358	0.4279	0.4501	0.4219	0.8319	0.9091	0.2341	0.4019
2/25/2016	0.4279	0.4279	0.4501	0.4219	0.4019	0.8319	0.9091	0.2341	0.4175
2/26/2016	0.4501	0.4501	0.4219	0.4019	0.4175	0.8319	0.9091	0.2341	0.4080
2/29/2016	0.4219	0.4219	0.4019	0.4175	0.4080	0.8319	0.9091	0.2341	0.4029
3/1/2016	0.4019	0.4019	0.4175	0.4080	0.4029	0.8319	0.9091	0.4164	0.4013
3/2/2016	0.4175	0.4175	0.4080	0.4029	0.4013	0.8319	0.9091	0.4164	0.3924
3/3/2016	0.4080	0.4080	0.4029	0.4013	0.3924	0.8319	0.9091	0.4164	0.3756
3/11/2016	0.3585	0.3585	0.3265	0.2854	0.3167	0.8319	0.9091	0.4164	0.3234
3/14/2016	0.3265	0.3265	0.2854	0.3167	0.3234	0.8319	0.9091	0.4164	0.3037
3/15/2016	0.2854	0.2854	0.3167	0.3234	0.3037	0.8319	0.9091	0.4164	0.2825
3/16/2016	0.3167	0.3167	0.3234	0.3037	0.2825	0.8319	0.9091	0.4164	0.3037
3/17/2016	0.3234	0.3234	0.3037	0.2825	0.3037	0.8319	0.9091	0.4164	0.3297
3/18/2016	0.3037	0.3037	0.2825	0.3037	0.3297	0.8319	0.9091	0.4164	0.3288



3/21/2016	0.2825	0.2825	0.3037	0.3297	0.3288	0.8319	0.9091	0.4164	0.2914
3/22/2016	0.3037	0.3037	0.3297	0.3288	0.2914	0.8319	0.9091	0.4164	0.3269
3/23/2016	0.3297	0.3297	0.3288	0.2914	0.3269	0.8319	0.9091	0.4164	0.3316
3/24/2016	0.3288	0.3288	0.2914	0.3269	0.3316	0.8319	0.9091	0.4164	0.3291
3/28/2016	0.2914	0.2914	0.3269	0.3316	0.3291	0.8319	0.9091	0.4164	0.3554
3/29/2016	0.3269	0.3269	0.3316	0.3291	0.3554	0.8319	0.9091	0.4164	0.3785
3/30/2016	0.3316	0.3316	0.3291	0.3554	0.3785	0.5908	0.8282	0.4164	0.3912
3/31/2016	0.3291	0.3291	0.3554	0.3785	0.3912	0.5908	0.8282	0.4164	0.3899
4/1/2016	0.3554	0.3554	0.3785	0.3912	0.3899	0.5908	0.8282	0.3160	0.3636
4/4/2016	0.3785	0.3785	0.3912	0.3899	0.3636	0.5908	0.8282	0.3160	0.3395
4/5/2016	0.3912	0.3912	0.3899	0.3636	0.3395	0.5908	0.8282	0.3160	0.3221
4/6/2016	0.3899	0.3899	0.3636	0.3395	0.3221	0.5908	0.8282	0.3160	0.3449
4/7/2016	0.3636	0.3636	0.3395	0.3221	0.3449	0.5908	0.8282	0.3160	0.3468
4/8/2016	0.3395	0.3395	0.3221	0.3449	0.3468	0.5908	0.8282	0.3160	0.3386
4/11/2016	0.3221	0.3221	0.3449	0.3468	0.3386	0.5908	0.8282	0.3160	0.3297
4/12/2016	0.3449	0.3449	0.3468	0.3386	0.3297	0.5908	0.8282	0.3160	0.3186
4/13/2016	0.3468	0.3468	0.3386	0.3297	0.3186	0.5908	0.8282	0.3160	0.3151
4/14/2016	0.3386	0.3386	0.3297	0.3186	0.3151	0.5908	0.8282	0.3160	0.3066
4/15/2016	0.3297	0.3297	0.3186	0.3151	0.3066	0.5908	0.8282	0.3160	0.3516
4/18/2016	0.3186	0.3186	0.3151	0.3066	0.3516	0.5908	0.8282	0.3160	0.3288
4/19/2016	0.3151	0.3151	0.3066	0.3516	0.3288	0.5908	0.8282	0.3160	0.3408
4/20/2016	0.3066	0.3066	0.3516	0.3288	0.3408	0.5908	0.8282	0.3160	0.3237
4/21/2016	0.3516	0.3516	0.3288	0.3408	0.3237	0.5908	0.8282	0.3160	0.3183
4/22/2016	0.3288	0.3288	0.3408	0.3237	0.3183	0.5908	0.8282	0.3160	0.3338
4/25/2016	0.3408	0.3408	0.3237	0.3183	0.3338	0.5908	0.8282	0.3160	0.3297
4/26/2016	0.3237	0.3237	0.3183	0.3338	0.3297	0.5908	0.8282	0.3160	0.3506
4/27/2016	0.3183	0.3183	0.3338	0.3297	0.3506	0.5908	0.8282	0.3160	0.3443
4/28/2016	0.3338	0.3338	0.3297	0.3506	0.3443	0.5908	0.8282	0.3160	0.3310
4/29/2016	0.3297	0.3297	0.3506	0.3443	0.3310	0.5908	0.8282	0.3160	0.3408
5/2/2016	0.3506	0.3506	0.3443	0.3310	0.3408	0.5908	0.8282	0.4496	0.3408
5/3/2016	0.3443	0.3443	0.3310	0.3408	0.3408	0.5908	0.8282	0.4496	0.3370
5/4/2016	0.3310	0.3310	0.3408	0.3408	0.3370	0.5908	0.8282	0.4496	0.3275
5/9/2016	0.3408	0.3408	0.3408	0.3370	0.3275	0.5908	0.8282	0.4496	0.3541
5/10/2016	0.3408	0.3408	0.3370	0.3275	0.3541	0.5908	0.8282	0.4496	0.3661
5/11/2016	0.3370	0.3370	0.3275	0.3541	0.3661	0.5908	0.8282	0.4496	0.3817
5/12/2016	0.3275	0.3275	0.3541	0.3661	0.3817	0.5908	0.8282	0.4496	0.3620
5/13/2016	0.3541	0.3541	0.3661	0.3817	0.3620	0.3388	0.6664	0.4496	0.3709
5/16/2016	0.3661	0.3661	0.3817	0.3620	0.3709	0.3388	0.6664	0.4496	0.3747
5/17/2016	0.3817	0.3817	0.3620	0.3709	0.3747	0.3388	0.6664	0.4496	0.3801
5/18/2016	0.3620	0.3620	0.3709	0.3747	0.3801	0.3388	0.6664	0.4496	0.3642
5/19/2016	0.3709	0.3709	0.3747	0.3801	0.3642	0.3388	0.6664	0.4496	0.3772
5/20/2016	0.3747	0.3747	0.3801	0.3642	0.3772	0.3388	0.6664	0.4496	0.4241
5/23/2016	0.3801	0.3801	0.3642	0.3772	0.4241	0.3388	0.6664	0.4496	0.4577
5/24/2016	0.3642	0.3642	0.3772	0.4241	0.4577	0.3388	0.6664	0.4496	0.4685
5/25/2016	0.3772	0.3772	0.4241	0.4577	0.4685	0.3388	0.6664	0.4496	0.4682
5/26/2016	0.4241	0.4241	0.4577	0.4685	0.4682	0.3388	0.6664	0.4496	0.4888
5/27/2016	0.4577	0.4577	0.4685	0.4682	0.4888	0.3388	0.6664	0.4496	0.4710
5/30/2016	0.4685	0.4685	0.4682	0.4888	0.4710	0.3388	0.6664	0.4496	0.4583
5/31/2016	0.4682	0.4682	0.4888	0.4710	0.4583	0.3388	0.6664	0.4496	0.4793
6/1/2016	0.4888	0.4888	0.4710	0.4583	0.4793	0.3388	0.6664	0.2869	0.4710
6/2/2016	0.4710	0.4710	0.4583	0.4793	0.4710	0.3388	0.6664	0.2869	0.4888
6/3/2016	0.4583	0.4583	0.4793	0.4710	0.4888	0.3388	0.6664	0.2869	0.4964
6/6/2016	0.4793	0.4793	0.4710	0.4888	0.4964	0.3388	0.6664	0.2869	0.4701
6/7/2016	0.4710	0.4710	0.4888	0.4964	0.4701	0.3388	0.6664	0.2869	0.4276
6/8/2016	0.4888	0.4888	0.4964	0.4701	0.4276	0.3388	0.6664	0.2869	0.3950



6/9/2016	0.4964	0.4964	0.4701	0.4276	0.3950	0.3388	0.6664	0.2869	0.3525
6/10/2016	0.4701	0.4701	0.4276	0.3950	0.3525	0.3388	0.6664	0.2869	0.3494
6/13/2016	0.4276	0.4276	0.3950	0.3525	0.3494	0.3388	0.6664	0.2869	0.3741
6/14/2016	0.3950	0.3950	0.3525	0.3494	0.3741	0.3388	0.6664	0.2869	0.3842
6/15/2016	0.3525	0.3525	0.3494	0.3741	0.3842	0.3388	0.6664	0.2869	0.3627
6/16/2016	0.3494	0.3494	0.3741	0.3842	0.3627	0.3388	0.6664	0.2869	0.4023
6/17/2016	0.3741	0.3741	0.3842	0.3627	0.4023	0.3388	0.6664	0.2869	0.3798
6/27/2016	0.3585	0.3585	0.3668	0.3706	0.3601	0.3588	0.7473	0.2869	0.3699
6/28/2016	0.3668	0.3668	0.3706	0.3601	0.3699	0.3588	0.7473	0.2869	0.4330
6/29/2016	0.3706	0.3706	0.3601	0.3699	0.4330	0.3588	0.7473	0.2869	0.3573
6/30/2016	0.3601	0.3601	0.3699	0.4330	0.3573	0.3588	0.7473	0.2869	0.3288
7/1/2016	0.3699	0.3699	0.4330	0.3573	0.3288	0.3588	0.7473	0.3458	0.3332
7/11/2016	0.4330	0.4330	0.3573	0.3288	0.3332	0.3588	0.7473	0.3458	0.3307
7/12/2016	0.3573	0.3573	0.3288	0.3332	0.3307	0.3588	0.7473	0.3458	0.3116
7/13/2016	0.3288	0.3288	0.3332	0.3307	0.3116	0.3588	0.7473	0.3458	0.3240
7/14/2016	0.3332	0.3332	0.3307	0.3116	0.3240	0.3588	0.7473	0.3458	0.3063
7/15/2016	0.3307	0.3307	0.3116	0.3240	0.3063	0.3588	0.7473	0.3458	0.3040
7/18/2016	0.3116	0.3116	0.3240	0.3063	0.3040	0.3588	0.7473	0.3458	0.3034
7/19/2016	0.3240	0.3240	0.3063	0.3040	0.3034	0.3588	0.7473	0.3458	0.3116
7/20/2016	0.3063	0.3063	0.3040	0.3034	0.3116	0.3588	0.7473	0.3458	0.3034
7/21/2016	0.3040	0.3040	0.3034	0.3116	0.3034	0.3588	0.7473	0.3458	0.3078
7/22/2016	0.3034	0.3034	0.3116	0.3034	0.3078	0.3588	0.7473	0.3458	0.3148
7/25/2016	0.3116	0.3116	0.3034	0.3078	0.3148	0.3588	0.7473	0.3458	0.3085
7/26/2016	0.3034	0.3034	0.3078	0.3148	0.3085	0.3588	0.7473	0.3458	0.3189
7/27/2016	0.3078	0.3078	0.3148	0.3085	0.3189	0.3588	0.7473	0.3458	0.3237
7/28/2016	0.3148	0.3148	0.3085	0.3189	0.3237	0.3588	0.7473	0.3458	0.3174
7/29/2016	0.3085	0.3085	0.3189	0.3237	0.3174	0.3588	0.7473	0.3458	0.3120
8/1/2016	0.3189	0.3189	0.3237	0.3174	0.3120	0.3588	0.7473	0.4617	0.3059
8/2/2016	0.3237	0.3237	0.3174	0.3120	0.3059	0.3588	0.7473	0.4617	0.3015
8/3/2016	0.3174	0.3174	0.3120	0.3059	0.3015	0.3588	0.7473	0.4617	0.3012
8/4/2016	0.3120	0.3120	0.3059	0.3015	0.3012	0.3588	0.7473	0.4617	0.3123
8/5/2016	0.3059	0.3059	0.3015	0.3012	0.3123	0.3588	0.7473	0.4617	0.3199
8/8/2016	0.3015	0.3015	0.3012	0.3123	0.3199	0.3588	0.7473	0.4617	0.3158
8/9/2016	0.3012	0.3012	0.3123	0.3199	0.3158	0.3588	0.7473	0.4617	0.3218
8/10/2016	0.3123	0.3123	0.3199	0.3158	0.3218	0.3588	0.7473	0.4617	0.3183
8/11/2016	0.3199	0.3199	0.3158	0.3218	0.3183	0.3588	0.7473	0.4617	0.3151
8/12/2016	0.3158	0.3158	0.3218	0.3183	0.3151	0.3588	0.7473	0.4617	0.3120
8/15/2016	0.3218	0.3218	0.3183	0.3151	0.3120	0.3588	0.7473	0.4617	0.3142
8/16/2016	0.3183	0.3183	0.3151	0.3120	0.3142	0.4502	0.7473	0.4617	0.3145
8/18/2016	0.3151	0.3151	0.3120	0.3142	0.3145	0.4502	0.7473	0.4617	0.3072
8/19/2016	0.3120	0.3120	0.3142	0.3145	0.3072	0.4502	0.7473	0.4617	0.3123
8/22/2016	0.3142	0.3142	0.3145	0.3072	0.3123	0.4502	0.7473	0.4617	0.3139
8/23/2016	0.3145	0.3145	0.3072	0.3123	0.3139	0.4502	0.7473	0.4617	0.3386
8/24/2016	0.3072	0.3072	0.3123	0.3139	0.3386	0.4502	0.7473	0.4617	0.3446
8/25/2016	0.3123	0.3123	0.3139	0.3386	0.3446	0.4502	0.7473	0.4617	0.3560
8/26/2016	0.3139	0.3139	0.3386	0.3446	0.3560	0.4502	0.7473	0.4617	0.3608
8/29/2016	0.3386	0.3386	0.3446	0.3560	0.3608	0.4502	0.7473	0.4617	0.3528
8/30/2016	0.3446	0.3446	0.3560	0.3608	0.3528	0.4502	0.7473	0.4617	0.3633
8/31/2016	0.3560	0.3560	0.3608	0.3528	0.3633	0.4502	0.7473	0.4617	0.3585
9/1/2016	0.3608	0.3608	0.3528	0.3633	0.3585	0.4502	0.7473	0.2306	0.3712
9/2/2016	0.3528	0.3528	0.3633	0.3585	0.3712	0.4502	0.7473	0.2306	0.3614
9/5/2016	0.3633	0.3633	0.3585	0.3712	0.3614	0.4502	0.7473	0.2306	0.3589
9/6/2016	0.3585	0.3585	0.3712	0.3614	0.3589	0.4502	0.7473	0.2306	0.3386
9/7/2016	0.3712	0.3712	0.3614	0.3589	0.3386	0.4502	0.7473	0.2306	0.3275
9/8/2016	0.3614	0.3614	0.3589	0.3386	0.3275	0.4502	0.7473	0.2306	0.3034



9/9/2016	0.3589	0.3589	0.3386	0.3275	0.3034	0.4502	0.7473	0.2306	0.3047
9/13/2016	0.3386	0.3386	0.3275	0.3034	0.3047	0.4502	0.7473	0.2306	0.3044
9/14/2016	0.3275	0.3275	0.3034	0.3047	0.3044	0.4502	0.7473	0.2306	0.3240
9/15/2016	0.3034	0.3034	0.3047	0.3044	0.3240	0.4502	0.7473	0.2306	0.3484
9/16/2016	0.3047	0.3047	0.3044	0.3240	0.3484	0.4502	0.7473	0.2306	0.3364
9/19/2016	0.3044	0.3044	0.3240	0.3484	0.3364	0.4502	0.7473	0.2306	0.3177
9/20/2016	0.3240	0.3240	0.3484	0.3364	0.3177	0.4502	0.7473	0.2306	0.3281
9/21/2016	0.3484	0.3484	0.3364	0.3177	0.3281	0.4502	0.7473	0.2306	0.3212
9/22/2016	0.3364	0.3364	0.3177	0.3281	0.3212	0.4502	0.7473	0.2306	0.3231
9/23/2016	0.3177	0.3177	0.3281	0.3212	0.3231	0.4502	0.7473	0.2306	0.3072
9/26/2016	0.3281	0.3281	0.3212	0.3231	0.3072	0.4502	0.7473	0.2306	0.3072
9/30/2016	0.3072	0.3072	0.3002	0.2847	0.2527	0.4776	0.6664	0.2306	0.2610
10/3/2016	0.3002	0.3002	0.2847	0.2527	0.2610	0.4776	0.6664	0.2461	0.2755
10/4/2016	0.2847	0.2847	0.2527	0.2610	0.2755	0.4776	0.6664	0.2461	0.2793
10/5/2016	0.2527	0.2527	0.2610	0.2755	0.2793	0.4776	0.6664	0.2461	0.2724
10/6/2016	0.2610	0.2610	0.2755	0.2793	0.2724	0.4776	0.6664	0.2461	0.2746
10/7/2016	0.2755	0.2755	0.2793	0.2724	0.2746	0.4776	0.6664	0.2461	0.2736
10/10/2016	0.2793	0.2793	0.2724	0.2746	0.2736	0.4776	0.6664	0.2461	0.2768
10/11/2016	0.2724	0.2724	0.2746	0.2736	0.2768	0.4776	0.6664	0.2461	0.2663
10/12/2016	0.2746	0.2746	0.2736	0.2768	0.2663	0.4776	0.6664	0.2461	0.2736
10/13/2016	0.2736	0.2736	0.2768	0.2663	0.2736	0.4776	0.6664	0.2461	0.2834
10/14/2016	0.2768	0.2768	0.2663	0.2736	0.2834	0.4776	0.6664	0.2461	0.2850
10/17/2016	0.2663	0.2663	0.2736	0.2834	0.2850	0.4776	0.6664	0.2461	0.2911
10/18/2016	0.2736	0.2736	0.2834	0.2850	0.2911	0.4776	0.6664	0.2461	0.2933
10/19/2016	0.2834	0.2834	0.2850	0.2911	0.2933	0.4776	0.6664	0.2461	0.2901
10/20/2016	0.2850	0.2850	0.2911	0.2933	0.2901	0.4776	0.6664	0.2461	0.2784
10/21/2016	0.2911	0.2911	0.2933	0.2901	0.2784	0.4776	0.6664	0.2461	0.2758
10/24/2016	0.2933	0.2933	0.2901	0.2784	0.2758	0.4776	0.6664	0.2461	0.2825
10/25/2016	0.2901	0.2901	0.2784	0.2758	0.2825	0.4776	0.6664	0.2461	0.2911
10/26/2016	0.2784	0.2784	0.2758	0.2825	0.2911	0.4776	0.6664	0.2461	0.2831
10/27/2016	0.2758	0.2758	0.2825	0.2911	0.2831	0.4776	0.6664	0.2461	0.2752
10/28/2016	0.2825	0.2825	0.2911	0.2831	0.2752	0.4776	0.6664	0.2461	0.2847
10/31/2016	0.2911	0.2911	0.2831	0.2752	0.2847	0.4776	0.6664	0.2461	0.2914
11/1/2016	0.2831	0.2831	0.2752	0.2847	0.2914	0.4776	0.6664	0.3578	0.2923
11/2/2016	0.2752	0.2752	0.2847	0.2914	0.2923	0.4776	0.6664	0.3578	0.2876
11/3/2016	0.2847	0.2847	0.2914	0.2923	0.2876	0.4776	0.6664	0.3578	0.2945
11/4/2016	0.2914	0.2914	0.2923	0.2876	0.2945	0.4776	0.6664	0.3578	0.2920
11/7/2016	0.2923	0.2923	0.2876	0.2945	0.2920	0.4776	0.6664	0.3578	0.3088
11/8/2016	0.2876	0.2876	0.2945	0.2920	0.3088	0.4776	0.6664	0.3578	0.3021
11/9/2016	0.2945	0.2945	0.2920	0.3088	0.3021	0.4776	0.6664	0.3578	0.3047
11/10/2016	0.2920	0.2920	0.3088	0.3021	0.3047	0.3175	0.6664	0.3578	0.3028
11/11/2016	0.3088	0.3088	0.3021	0.3047	0.3028	0.3175	0.6664	0.3578	0.3135
11/14/2016	0.3021	0.3021	0.3047	0.3028	0.3135	0.3175	0.6664	0.3578	0.3871
11/15/2016	0.3047	0.3047	0.3028	0.3135	0.3871	0.3175	0.6664	0.3578	0.3896
11/16/2016	0.3028	0.3028	0.3135	0.3871	0.3896	0.3175	0.6664	0.3578	0.3833
11/17/2016	0.3135	0.3135	0.3871	0.3896	0.3833	0.3175	0.6664	0.3578	0.3861
11/18/2016	0.3871	0.3871	0.3896	0.3833	0.3861	0.3175	0.6664	0.3578	0.3981
11/21/2016	0.3896	0.3896	0.3833	0.3861	0.3981	0.3175	0.6664	0.3578	0.4054
11/22/2016	0.3833	0.3833	0.3861	0.3981	0.4054	0.3175	0.6664	0.3578	0.4149
11/23/2016	0.3861	0.3861	0.3981	0.4054	0.4149	0.3175	0.6664	0.3578	0.4105
11/24/2016	0.3981	0.3981	0.4054	0.4149	0.4105	0.3175	0.6664	0.3578	0.4260
11/25/2016	0.4054	0.4054	0.4149	0.4105	0.4260	0.3175	0.6664	0.3578	0.4473
11/28/2016	0.4149	0.4149	0.4105	0.4260	0.4473	0.3175	0.6664	0.3578	0.4568
11/29/2016	0.4105	0.4105	0.4260	0.4473	0.4568	0.3175	0.6664	0.3578	0.4241
12/8/2016	0.4606	0.4606	0.4422	0.4397	0.4045	0.3175	0.6664	0.3130	0.3826



12/9/2016	0.4422	0.4422	0.4397	0.4045	0.3826	0.3175	0.6664	0.3130	0.3725
12/13/2016	0.4397	0.4397	0.4045	0.3826	0.3725	0.3175	0.6664	0.3130	0.3829
12/14/2016	0.4045	0.4045	0.3826	0.3725	0.3829	0.3175	0.6664	0.3130	0.3741
12/15/2016	0.3826	0.3826	0.3725	0.3829	0.3741	0.3175	0.6664	0.3130	0.3665
12/16/2016	0.3725	0.3725	0.3829	0.3741	0.3665	0.3175	0.6664	0.3130	0.3924
12/19/2016	0.3829	0.3829	0.3741	0.3665	0.3924	0.3175	0.6664	0.3130	0.4111
12/20/2016	0.3741	0.3741	0.3665	0.3924	0.4111	0.3175	0.6664	0.3130	0.3969
12/21/2016	0.3665	0.3665	0.3924	0.4111	0.3969	0.3175	0.6664	0.3130	0.4007
12/22/2016	0.3924	0.3924	0.4111	0.3969	0.4007	0.3175	0.6664	0.3130	0.4260
12/23/2016	0.4111	0.4111	0.3969	0.4007	0.4260	0.2943	0.6664	0.3130	0.4140
12/27/2016	0.3969	0.3969	0.4007	0.4260	0.4140	0.2943	0.6664	0.3130	0.4251
12/28/2016	0.4007	0.4007	0.4260	0.4140	0.4251	0.2943	0.6664	0.3130	0.4143
12/29/2016	0.4260	0.4260	0.4140	0.4251	0.4143	0.2943	0.6664	0.3130	0.4178
12/30/2016	0.4140	0.4140	0.4251	0.4143	0.4178	0.2943	0.6664	0.3130	0.4260
1/3/2017	0.4251	0.4251	0.4143	0.4178	0.4260	0.2943	0.6664	0.2168	0.4143
1/4/2017	0.4143	0.4143	0.4178	0.4260	0.4143	0.2943	0.6664	0.2168	0.4298
1/5/2017	0.4178	0.4178	0.4260	0.4143	0.4298	0.2943	0.6664	0.2168	0.4276
1/6/2017	0.4260	0.4260	0.4143	0.4298	0.4276	0.2943	0.6664	0.2168	0.3934
1/9/2017	0.4143	0.4143	0.4298	0.4276	0.3934	0.2943	0.6664	0.2168	0.3861
1/10/2017	0.4298	0.4298	0.4276	0.3934	0.3861	0.2943	0.6664	0.2168	0.3981
1/11/2017	0.4276	0.4276	0.3934	0.3861	0.3981	0.2943	0.6664	0.2168	0.3776
1/12/2017	0.3934	0.3934	0.3861	0.3981	0.3776	0.2943	0.6664	0.2168	0.3798
1/13/2017	0.3861	0.3861	0.3981	0.3776	0.3798	0.2943	0.6664	0.2168	0.3674
1/16/2017	0.3981	0.3981	0.3776	0.3798	0.3674	0.2943	0.6664	0.2168	0.3737
1/17/2017	0.3776	0.3776	0.3798	0.3674	0.3737	0.2943	0.6664	0.2168	0.3883
1/18/2017	0.3798	0.3798	0.3674	0.3737	0.3883	0.2943	0.6664	0.2168	0.3969
1/19/2017	0.3674	0.3674	0.3737	0.3883	0.3969	0.2943	0.6664	0.2168	0.3801
1/25/2017	0.3801	0.3801	0.3953	0.3972	0.3940	0.2943	0.6664	0.2168	0.3807
1/26/2017	0.3953	0.3953	0.3972	0.3940	0.3807	0.2943	0.6664	0.2168	0.3839
1/27/2017	0.3972	0.3972	0.3940	0.3807	0.3839	0.2943	0.6664	0.2168	0.3791
1/30/2017	0.3940	0.3940	0.3807	0.3839	0.3791	0.2943	0.6664	0.2168	0.3899
1/31/2017	0.3807	0.3807	0.3839	0.3791	0.3899	0.2943	0.6664	0.2168	0.3823
2/1/2017	0.3839	0.3839	0.3791	0.3899	0.3823	0.2943	0.6664	0.2379	0.3848
2/2/2017	0.3791	0.3791	0.3899	0.3823	0.3848	0.2943	0.6664	0.2379	0.3867
2/3/2017	0.3899	0.3899	0.3823	0.3848	0.3867	0.2943	0.6664	0.2379	0.3947
2/6/2017	0.3823	0.3823	0.3848	0.3867	0.3947	0.2943	0.6664	0.2379	0.3909
2/7/2017	0.3848	0.3848	0.3867	0.3947	0.3909	0.2943	0.6664	0.2379	0.3804
2/8/2017	0.3867	0.3867	0.3947	0.3909	0.3804	0.3151	0.5855	0.2379	0.3782
2/9/2017	0.3947	0.3947	0.3909	0.3804	0.3782	0.3151	0.5855	0.2379	0.3829
2/10/2017	0.3909	0.3909	0.3804	0.3782	0.3829	0.3151	0.5855	0.2379	0.3737
2/13/2017	0.3804	0.3804	0.3782	0.3829	0.3737	0.3151	0.5855	0.2379	0.3769
2/14/2017	0.3782	0.3782	0.3829	0.3737	0.3769	0.3151	0.5855	0.2379	0.3807
2/16/2017	0.3829	0.3829	0.3737	0.3769	0.3807	0.3151	0.5855	0.2379	0.3807
2/17/2017	0.3737	0.3737	0.3769	0.3807	0.3807	0.3151	0.5855	0.2379	0.3804
2/20/2017	0.3769	0.3769	0.3807	0.3807	0.3804	0.3151	0.5855	0.2379	0.3801
2/21/2017	0.3807	0.3807	0.3807	0.3804	0.3801	0.3151	0.5855	0.2379	0.3877
2/22/2017	0.3807	0.3807	0.3804	0.3801	0.3877	0.3151	0.5855	0.2379	0.3934
2/23/2017	0.3804	0.3804	0.3801	0.3877	0.3934	0.3151	0.5855	0.2379	0.3890
2/24/2017	0.3801	0.3801	0.3877	0.3934	0.3890	0.3151	0.5855	0.2379	0.3902
2/27/2017	0.3877	0.3877	0.3934	0.3890	0.3902	0.3151	0.5855	0.2379	0.3826
2/28/2017	0.3934	0.3934	0.3890	0.3902	0.3826	0.3151	0.5855	0.2379	0.3836
3/1/2017	0.3890	0.3890	0.3902	0.3826	0.3836	0.3151	0.5855	0.2445	0.3861
3/2/2017	0.3902	0.3902	0.3826	0.3836	0.3861	0.3151	0.5855	0.2445	0.3905
3/3/2017	0.3826	0.3826	0.3836	0.3861	0.3905	0.3151	0.5855	0.2445	0.3905
3/6/2017	0.3836	0.3836	0.3861	0.3905	0.3905	0.3151	0.5855	0.2445	0.3950



3/7/2017	0.3861	0.3861	0.3905	0.3905	0.3950	0.3151	0.5855	0.2445	0.3915
3/8/2017	0.3905	0.3905	0.3905	0.3950	0.3915	0.3151	0.5855	0.2445	0.3871
3/9/2017	0.3905	0.3905	0.3950	0.3915	0.3871	0.3151	0.5855	0.2445	0.3839
3/10/2017	0.3950	0.3950	0.3915	0.3871	0.3839	0.3151	0.5855	0.2445	0.3943
3/13/2017	0.3915	0.3915	0.3871	0.3839	0.3943	0.3151	0.5855	0.2445	0.4007
3/14/2017	0.3871	0.3871	0.3839	0.3943	0.4007	0.3151	0.5855	0.2445	0.3915
3/15/2017	0.3839	0.3839	0.3943	0.4007	0.3915	0.3151	0.5855	0.2445	0.3902
3/16/2017	0.3943	0.3943	0.4007	0.3915	0.3902	0.3151	0.5855	0.2445	0.3950
3/17/2017	0.4007	0.4007	0.3915	0.3902	0.3950	0.3151	0.5855	0.2445	0.3826
3/20/2017	0.3915	0.3915	0.3902	0.3950	0.3826	0.3151	0.5855	0.2445	0.3845
3/21/2017	0.3902	0.3902	0.3950	0.3826	0.3845	0.3151	0.5855	0.2445	0.3804
3/22/2017	0.3950	0.3950	0.3826	0.3845	0.3804	0.3151	0.5855	0.2445	0.3737
3/23/2017	0.3826	0.3826	0.3845	0.3804	0.3737	0.3042	0.5045	0.2445	0.3823
3/24/2017	0.3845	0.3845	0.3804	0.3737	0.3823	0.3042	0.5045	0.2445	0.3814
3/27/2017	0.3804	0.3804	0.3737	0.3823	0.3814	0.3042	0.5045	0.2445	0.3804
3/29/2017	0.3737	0.3737	0.3823	0.3814	0.3804	0.3042	0.5045	0.2445	0.3756
3/30/2017	0.3823	0.3823	0.3814	0.3804	0.3756	0.3042	0.5045	0.2445	0.3785
3/31/2017	0.3814	0.3814	0.3804	0.3756	0.3785	0.3042	0.5045	0.2445	0.3763
4/3/2017	0.3804	0.3804	0.3756	0.3785	0.3763	0.3042	0.5045	0.2386	0.3779
4/10/2017	0.3788	0.3788	0.3795	0.3804	0.3798	0.3042	0.5045	0.2386	0.3842
4/11/2017	0.3795	0.3795	0.3804	0.3798	0.3842	0.3042	0.5045	0.2386	0.3785
4/12/2017	0.3804	0.3804	0.3798	0.3842	0.3785	0.3042	0.5045	0.2386	0.3655
4/13/2017	0.3798	0.3798	0.3842	0.3785	0.3655	0.3042	0.5045	0.2386	0.3706
4/17/2017	0.3842	0.3842	0.3785	0.3655	0.3706	0.3042	0.5045	0.2386	0.3598
4/18/2017	0.3785	0.3785	0.3655	0.3706	0.3598	0.3042	0.5045	0.2386	0.3570
4/20/2017	0.3655	0.3655	0.3706	0.3598	0.3570	0.3042	0.5045	0.2386	0.3709
4/21/2017	0.3706	0.3706	0.3598	0.3570	0.3709	0.3042	0.5045	0.2386	0.3801
4/25/2017	0.3598	0.3598	0.3570	0.3709	0.3801	0.3042	0.5045	0.2386	0.3776
4/26/2017	0.3570	0.3570	0.3709	0.3801	0.3776	0.3042	0.5045	0.2386	0.3699
4/27/2017	0.3709	0.3709	0.3801	0.3776	0.3699	0.3042	0.5045	0.2386	0.3642
4/28/2017	0.3801	0.3801	0.3776	0.3699	0.3642	0.3042	0.5045	0.2386	0.3709
5/2/2017	0.3776	0.3776	0.3699	0.3642	0.3709	0.3042	0.5045	0.4292	0.3798
5/3/2017	0.3699	0.3699	0.3642	0.3709	0.3798	0.3042	0.5045	0.4292	0.3763
5/4/2017	0.3642	0.3642	0.3709	0.3798	0.3763	0.3042	0.5045	0.4292	0.3703
5/5/2017	0.3709	0.3709	0.3798	0.3763	0.3703	0.3042	0.5045	0.4292	0.3807
5/8/2017	0.3798	0.3798	0.3763	0.3703	0.3807	0.3042	0.5045	0.4292	0.3836
5/9/2017	0.3763	0.3763	0.3703	0.3807	0.3836	0.3042	0.5045	0.4292	0.3788
5/10/2017	0.3703	0.3703	0.3807	0.3836	0.3788	0.3042	0.5045	0.4292	0.3766
5/12/2017	0.3807	0.3807	0.3836	0.3788	0.3766	0.3042	0.5045	0.4292	0.3886
5/15/2017	0.3836	0.3836	0.3788	0.3766	0.3886	0.2113	0.5045	0.4292	0.3839
5/16/2017	0.3788	0.3788	0.3766	0.3886	0.3839	0.2113	0.5045	0.4292	0.3772
5/17/2017	0.3766	0.3766	0.3886	0.3839	0.3772	0.2113	0.5045	0.4292	0.3706
5/18/2017	0.3886	0.3886	0.3839	0.3772	0.3706	0.2113	0.5045	0.4292	0.3731
5/19/2017	0.3839	0.3839	0.3772	0.3706	0.3731	0.2113	0.5045	0.4292	0.3848
5/22/2017	0.3772	0.3772	0.3706	0.3731	0.3848	0.2113	0.5045	0.4292	0.4061
5/23/2017	0.3706	0.3706	0.3731	0.3848	0.4061	0.2113	0.5045	0.4292	0.3703
5/24/2017	0.3731	0.3731	0.3848	0.4061	0.3703	0.2113	0.5045	0.4292	0.3699
5/26/2017	0.3848	0.3848	0.4061	0.3703	0.3699	0.2113	0.5045	0.4292	0.3763
5/29/2017	0.4061	0.4061	0.3703	0.3699	0.3763	0.2113	0.5045	0.4292	0.3696
5/30/2017	0.3703	0.3703	0.3699	0.3763	0.3696	0.2113	0.5045	0.4292	0.3750
5/31/2017	0.3699	0.3699	0.3763	0.3696	0.3750	0.2113	0.5045	0.4292	0.3826
6/2/2017	0.3763	0.3763	0.3696	0.3750	0.3826	0.2113	0.5045	0.1000	0.3779
6/5/2017	0.3696	0.3696	0.3750	0.3826	0.3779	0.2113	0.5045	0.1000	0.3747
6/6/2017	0.3750	0.3750	0.3826	0.3779	0.3747	0.2113	0.5045	0.1000	0.3671
6/7/2017	0.3826	0.3826	0.3779	0.3747	0.3671	0.2113	0.5045	0.1000	0.3665



6/8/2017	0.3779	0.3779	0.3747	0.3671	0.3665	0.2113	0.5045	0.1000	0.3734
6/9/2017	0.3747	0.3747	0.3671	0.3665	0.3734	0.2113	0.5045	0.1000	0.3763
6/12/2017	0.3671	0.3671	0.3665	0.3734	0.3763	0.2113	0.5045	0.1000	0.3687
6/16/2017	0.3687	0.3687	0.3687	0.3693	0.3668	0.2113	0.5045	0.1000	0.3655
6/19/2017	0.3687	0.3687	0.3693	0.3668	0.3655	0.2113	0.5045	0.1000	0.3706
6/20/2017	0.3693	0.3693	0.3668	0.3655	0.3706	0.2113	0.5045	0.1000	0.3668
6/21/2017	0.3668	0.3668	0.3655	0.3706	0.3668	0.2113	0.5045	0.1000	0.3703
6/22/2017	0.3655	0.3655	0.3706	0.3668	0.3703	0.2113	0.5045	0.1000	0.3715
7/3/2017	0.3706	0.3706	0.3668	0.3703	0.3715	0.2113	0.5045	0.6180	0.3772
7/4/2017	0.3668	0.3668	0.3703	0.3715	0.3772	0.2113	0.5045	0.6180	0.3791
7/5/2017	0.3703	0.3703	0.3715	0.3772	0.3791	0.2113	0.5045	0.6180	0.3985
7/6/2017	0.3715	0.3715	0.3772	0.3791	0.3985	0.2113	0.5045	0.6180	0.3867
7/7/2017	0.3772	0.3772	0.3791	0.3985	0.3867	0.1942	0.5045	0.6180	0.3915
7/10/2017	0.3791	0.3791	0.3985	0.3867	0.3915	0.1942	0.5045	0.6180	0.4019
7/11/2017	0.3985	0.3985	0.3867	0.3915	0.4019	0.1942	0.5045	0.6180	0.4054
7/12/2017	0.3867	0.3867	0.3915	0.4019	0.4054	0.1942	0.5045	0.6180	0.3988
7/13/2017	0.3915	0.3915	0.4019	0.4054	0.3988	0.1942	0.5045	0.6180	0.3928
7/14/2017	0.4019	0.4019	0.4054	0.3988	0.3928	0.1942	0.5045	0.6180	0.3845
7/17/2017	0.4054	0.4054	0.3988	0.3928	0.3845	0.1942	0.5045	0.6180	0.3861
7/18/2017	0.3988	0.3988	0.3928	0.3845	0.3861	0.1942	0.5045	0.6180	0.3753
7/19/2017	0.3928	0.3928	0.3845	0.3861	0.3753	0.1942	0.5045	0.6180	0.3756
7/20/2017	0.3845	0.3845	0.3861	0.3753	0.3756	0.1942	0.5045	0.6180	0.3725
7/21/2017	0.3861	0.3861	0.3753	0.3756	0.3725	0.1942	0.5045	0.6180	0.3776
7/24/2017	0.3753	0.3753	0.3756	0.3725	0.3776	0.1942	0.5045	0.6180	0.3785
7/25/2017	0.3756	0.3756	0.3725	0.3776	0.3785	0.1942	0.5045	0.6180	0.3772
7/26/2017	0.3725	0.3725	0.3776	0.3785	0.3772	0.1942	0.5045	0.6180	0.3776
7/27/2017	0.3776	0.3776	0.3785	0.3772	0.3776	0.1942	0.5045	0.6180	0.3820
7/28/2017	0.3785	0.3785	0.3772	0.3776	0.3820	0.1942	0.5045	0.6180	0.3760
7/31/2017	0.3772	0.3772	0.3776	0.3820	0.3760	0.1942	0.5045	0.6180	0.3795
8/1/2017	0.3776	0.3776	0.3820	0.3760	0.3795	0.1942	0.5045	0.2033	0.3785
8/2/2017	0.3820	0.3820	0.3760	0.3795	0.3785	0.1942	0.5045	0.2033	0.3769
8/3/2017	0.3760	0.3760	0.3795	0.3785	0.3769	0.1942	0.5045	0.2033	0.3810
8/4/2017	0.3795	0.3795	0.3785	0.3769	0.3810	0.1942	0.5045	0.2033	0.3807
8/7/2017	0.3785	0.3785	0.3769	0.3810	0.3807	0.1942	0.5045	0.2033	0.3788
8/8/2017	0.3769	0.3769	0.3810	0.3807	0.3788	0.1942	0.5045	0.2033	0.3772
8/9/2017	0.3810	0.3810	0.3807	0.3788	0.3772	0.1942	0.5045	0.2033	0.3772
8/10/2017	0.3807	0.3807	0.3788	0.3772	0.3772	0.1942	0.5045	0.2033	0.3788
8/11/2017	0.3788	0.3788	0.3772	0.3772	0.3788	0.1942	0.5045	0.2033	0.3833
8/14/2017	0.3772	0.3772	0.3772	0.3788	0.3833	0.1942	0.5045	0.2033	0.3934
8/15/2017	0.3772	0.3772	0.3788	0.3833	0.3934	0.1942	0.5045	0.2033	0.3852
8/16/2017	0.3788	0.3788	0.3833	0.3934	0.3852	0.1942	0.5045	0.2033	0.3852
8/22/2017	0.3852	0.3852	0.3852	0.3947	0.3928	0.2029	0.5045	0.2033	0.3886
8/23/2017	0.3852	0.3852	0.3947	0.3928	0.3886	0.2029	0.5045	0.2033	0.3833
8/24/2017	0.3947	0.3947	0.3928	0.3886	0.3833	0.2029	0.5045	0.2033	0.3845
8/25/2017	0.3928	0.3928	0.3886	0.3833	0.3845	0.2029	0.5045	0.2033	0.3883
8/28/2017	0.3886	0.3886	0.3833	0.3845	0.3883	0.2029	0.5045	0.2033	0.3864
8/29/2017	0.3833	0.3833	0.3845	0.3883	0.3864	0.2029	0.5045	0.2033	0.3833
8/30/2017	0.3845	0.3845	0.3883	0.3864	0.3833	0.2029	0.5045	0.2033	0.3864
8/31/2017	0.3883	0.3883	0.3864	0.3833	0.3864	0.2029	0.5045	0.2033	0.3848
9/4/2017	0.3864	0.3864	0.3833	0.3864	0.3848	0.2029	0.5045	0.1642	0.3874
9/5/2017	0.3833	0.3833	0.3864	0.3848	0.3874	0.2029	0.5045	0.1642	0.3855
9/6/2017	0.3864	0.3864	0.3848	0.3874	0.3855	0.2029	0.5045	0.1642	0.3826
9/7/2017	0.3848	0.3848	0.3874	0.3855	0.3826	0.2029	0.5045	0.1642	0.3829
9/8/2017	0.3874	0.3874	0.3855	0.3826	0.3829	0.2029	0.5045	0.1642	0.3810
9/11/2017	0.3855	0.3855	0.3826	0.3829	0.3810	0.2029	0.5045	0.1642	0.3661



9/12/2017	0.3826	0.3826	0.3829	0.3810	0.3661	0.2029	0.5045	0.1642	0.3250
9/13/2017	0.3829	0.3829	0.3810	0.3661	0.3250	0.2029	0.5045	0.1642	0.3351
9/14/2017	0.3810	0.3810	0.3661	0.3250	0.3351	0.2029	0.5045	0.1642	0.3424
9/15/2017	0.3661	0.3661	0.3250	0.3351	0.3424	0.2029	0.5045	0.1642	0.3519
9/18/2017	0.3250	0.3250	0.3351	0.3424	0.3519	0.2029	0.5045	0.1642	0.3589
9/19/2017	0.3351	0.3351	0.3424	0.3519	0.3589	0.2029	0.5045	0.1642	0.3516
9/20/2017	0.3424	0.3424	0.3519	0.3589	0.3516	0.2029	0.5045	0.1642	0.3579
9/22/2017	0.3519	0.3519	0.3589	0.3516	0.3579	0.2029	0.5045	0.1642	0.3617
9/25/2017	0.3589	0.3589	0.3516	0.3579	0.3617	0.2029	0.5045	0.1642	0.3791
9/26/2017	0.3516	0.3516	0.3579	0.3617	0.3791	0.2029	0.5045	0.1642	0.3728
9/27/2017	0.3579	0.3579	0.3617	0.3791	0.3728	0.2029	0.5045	0.1642	0.3864
9/28/2017	0.3617	0.3617	0.3791	0.3728	0.3864	0.2029	0.5045	0.1642	0.3978
9/29/2017	0.3791	0.3791	0.3728	0.3864	0.3978	0.2029	0.5045	0.1642	0.4232
10/2/2017	0.3728	0.3728	0.3864	0.3978	0.4232	0.2029	0.5045	0.3450	0.4320
10/3/2017	0.3864	0.3864	0.3978	0.4232	0.4320	0.2029	0.5045	0.3450	0.4343
10/4/2017	0.3978	0.3978	0.4232	0.4320	0.4343	0.2029	0.5045	0.3450	0.4606
10/5/2017	0.4232	0.4232	0.4320	0.4343	0.4606	0.2337	0.7473	0.3450	0.4311
10/6/2017	0.4320	0.4320	0.4343	0.4606	0.4311	0.2337	0.7473	0.3450	0.4292
10/9/2017	0.4343	0.4343	0.4606	0.4311	0.4292	0.2337	0.7473	0.3450	0.4298
10/10/2017	0.4606	0.4606	0.4311	0.4292	0.4298	0.2337	0.7473	0.3450	0.4358
10/11/2017	0.4311	0.4311	0.4292	0.4298	0.4358	0.2337	0.7473	0.3450	0.4317
10/12/2017	0.4292	0.4292	0.4298	0.4358	0.4317	0.2337	0.7473	0.3450	0.4374
10/13/2017	0.4298	0.4298	0.4358	0.4317	0.4374	0.2337	0.7473	0.3450	0.4412
10/16/2017	0.4358	0.4358	0.4317	0.4374	0.4412	0.2337	0.7473	0.3450	0.4371
10/17/2017	0.4317	0.4317	0.4374	0.4412	0.4371	0.2337	0.7473	0.3450	0.4292
10/18/2017	0.4374	0.4374	0.4412	0.4371	0.4292	0.2337	0.7473	0.3450	0.4314
10/19/2017	0.4412	0.4412	0.4371	0.4292	0.4314	0.2337	0.7473	0.3450	0.4390
10/20/2017	0.4371	0.4371	0.4292	0.4314	0.4390	0.2337	0.7473	0.3450	0.4412
10/23/2017	0.4292	0.4292	0.4314	0.4390	0.4412	0.2337	0.7473	0.3450	0.4400
10/24/2017	0.4314	0.4314	0.4390	0.4412	0.4400	0.2337	0.7473	0.3450	0.4457
10/25/2017	0.4390	0.4390	0.4412	0.4400	0.4457	0.2337	0.7473	0.3450	0.4438
10/26/2017	0.4412	0.4412	0.4400	0.4457	0.4438	0.2337	0.7473	0.3450	0.4568
10/27/2017	0.4400	0.4400	0.4457	0.4438	0.4568	0.2337	0.7473	0.3450	0.4536
10/30/2017	0.4457	0.4457	0.4438	0.4568	0.4536	0.2337	0.7473	0.3450	0.4758
10/31/2017	0.4438	0.4438	0.4568	0.4536	0.4758	0.2337	0.7473	0.3450	0.4599
11/1/2017	0.4568	0.4568	0.4536	0.4758	0.4599	0.2337	0.7473	0.5075	0.4574
11/2/2017	0.4536	0.4536	0.4758	0.4599	0.4574	0.2337	0.7473	0.5075	0.4637
11/3/2017	0.4758	0.4758	0.4599	0.4574	0.4637	0.2337	0.7473	0.5075	0.4542
11/6/2017	0.4599	0.4599	0.4574	0.4637	0.4542	0.2337	0.7473	0.5075	0.4346
11/7/2017	0.4574	0.4574	0.4637	0.4542	0.4346	0.2337	0.7473	0.5075	0.4438
11/8/2017	0.4637	0.4637	0.4542	0.4346	0.4438	0.2337	0.7473	0.5075	0.4358
11/9/2017	0.4542	0.4542	0.4346	0.4438	0.4358	0.2337	0.7473	0.5075	0.4422
11/10/2017	0.4346	0.4346	0.4438	0.4358	0.4422	0.2337	0.7473	0.5075	0.4390
11/13/2017	0.4438	0.4438	0.4358	0.4422	0.4390	0.2337	0.7473	0.5075	0.4390
11/14/2017	0.4358	0.4358	0.4422	0.4390	0.4390	0.2337	0.7473	0.5075	0.4520
11/15/2017	0.4422	0.4422	0.4390	0.4390	0.4520	0.2337	0.7473	0.5075	0.4479
11/16/2017	0.4390	0.4390	0.4390	0.4520	0.4479	0.1000	0.7473	0.5075	0.4469
11/17/2017	0.4390	0.4390	0.4520	0.4479	0.4469	0.1000	0.7473	0.5075	0.4466
11/23/2017	0.4466	0.4466	0.4400	0.4438	0.4485	0.1000	0.7473	0.5075	0.4419
11/24/2017	0.4400	0.4400	0.4438	0.4485	0.4419	0.1000	0.7473	0.5075	0.4355
11/27/2017	0.4438	0.4438	0.4485	0.4419	0.4355	0.1000	0.7473	0.5075	0.4365
11/28/2017	0.4485	0.4485	0.4419	0.4355	0.4365	0.1000	0.7473	0.5075	0.4381
11/29/2017	0.4419	0.4419	0.4355	0.4365	0.4381	0.1000	0.7473	0.5075	0.4431
11/30/2017	0.4355	0.4355	0.4365	0.4381	0.4431	0.1000	0.7473	0.5075	0.4393
12/4/2017	0.4365	0.4365	0.4381	0.4431	0.4393	0.1000	0.7473	0.6042	0.4390



12/5/2017	0.4381	0.4381	0.4431	0.4393	0.4390	0.1000	0.7473	0.6042	0.4431
12/6/2017	0.4431	0.4431	0.4393	0.4390	0.4431	0.1000	0.7473	0.6042	0.4393
12/7/2017	0.4393	0.4393	0.4390	0.4431	0.4393	0.1000	0.7473	0.6042	0.4422
12/8/2017	0.4390	0.4390	0.4431	0.4393	0.4422	0.1000	0.7473	0.6042	0.4511
12/11/2017	0.4431	0.4431	0.4393	0.4422	0.4511	0.1000	0.7473	0.6042	0.4523
12/12/2017	0.4393	0.4393	0.4422	0.4511	0.4523	0.1000	0.7473	0.6042	0.4492
12/13/2017	0.4422	0.4422	0.4511	0.4523	0.4492	0.1000	0.7473	0.6042	0.4504
12/14/2017	0.4511	0.4511	0.4523	0.4492	0.4504	0.1000	0.7473	0.6042	0.4628
12/15/2017	0.4523	0.4523	0.4492	0.4504	0.4628	0.1000	0.7473	0.6042	0.4552
12/18/2017	0.4492	0.4492	0.4504	0.4628	0.4552	0.1000	0.7473	0.6042	0.4577
12/19/2017	0.4504	0.4504	0.4628	0.4552	0.4577	0.1000	0.7473	0.6042	0.4612
12/20/2017	0.4628	0.4628	0.4552	0.4577	0.4612	0.1000	0.7473	0.6042	0.4621
12/21/2017	0.4552	0.4552	0.4577	0.4612	0.4621	0.1000	0.7473	0.6042	0.4596
12/22/2017	0.4577	0.4577	0.4612	0.4621	0.4596	0.1000	0.7473	0.6042	0.4488
12/27/2017	0.4612	0.4612	0.4621	0.4596	0.4488	0.1000	0.7473	0.6042	0.4530
12/28/2017	0.4621	0.4621	0.4596	0.4488	0.4530	0.1000	0.7473	0.6042	0.4542
12/29/2017	0.4596	0.4596	0.4488	0.4530	0.4542	0.1000	0.7473	0.6042	0.4536
1/2/2018	0.4488	0.4488	0.4530	0.4542	0.4536	0.1000	0.7473	0.7123	0.4498
1/3/2018	0.4530	0.4530	0.4542	0.4536	0.4498	0.1000	0.7473	0.7123	0.4479
1/4/2018	0.4542	0.4542	0.4536	0.4498	0.4479	0.1064	0.4236	0.7123	0.4339
1/5/2018	0.4536	0.4536	0.4498	0.4479	0.4339	0.1064	0.4236	0.7123	0.4263
1/8/2018	0.4498	0.4498	0.4479	0.4339	0.4263	0.1064	0.4236	0.7123	0.4045
1/9/2018	0.4479	0.4479	0.4339	0.4263	0.4045	0.1064	0.4236	0.7123	0.4019
1/10/2018	0.4339	0.4339	0.4263	0.4045	0.4019	0.1064	0.4236	0.7123	0.4118
1/11/2018	0.4263	0.4263	0.4045	0.4019	0.4118	0.1064	0.4236	0.7123	0.4184
1/12/2018	0.4045	0.4045	0.4019	0.4118	0.4184	0.1064	0.4236	0.7123	0.4115
1/15/2018	0.4019	0.4019	0.4118	0.4184	0.4115	0.1064	0.4236	0.7123	0.3909
1/16/2018	0.4118	0.4118	0.4184	0.4115	0.3909	0.1064	0.4236	0.7123	0.3807
1/17/2018	0.4184	0.4184	0.4115	0.3909	0.3807	0.1064	0.4236	0.7123	0.3817
1/18/2018	0.4115	0.4115	0.3909	0.3807	0.3817	0.1064	0.4236	0.7123	0.3785
1/19/2018	0.3909	0.3909	0.3807	0.3817	0.3785	0.1064	0.4236	0.7123	0.3918
1/23/2018	0.3817	0.3817	0.3785	0.3918	0.3810	0.1064	0.4236	0.7123	0.3820
1/24/2018	0.3785	0.3785	0.3918	0.3810	0.3820	0.1064	0.4236	0.7123	0.3769
1/25/2018	0.3918	0.3918	0.3810	0.3820	0.3769	0.1064	0.4236	0.7123	0.3779
1/26/2018	0.3810	0.3810	0.3820	0.3769	0.3779	0.1064	0.4236	0.7123	0.3680
1/29/2018	0.3820	0.3820	0.3769	0.3779	0.3680	0.1064	0.4236	0.7123	0.3722
1/30/2018	0.3769	0.3769	0.3779	0.3680	0.3722	0.1064	0.4236	0.7123	0.3798
1/31/2018	0.3779	0.3779	0.3680	0.3722	0.3798	0.1064	0.4236	0.7123	0.4023
2/1/2018	0.3680	0.3680	0.3722	0.3798	0.4023	0.1064	0.4236	0.5650	0.4070
2/2/2018	0.3722	0.3722	0.3798	0.4023	0.4070	0.1064	0.4236	0.5650	0.4035
2/5/2018	0.3798	0.3798	0.4023	0.4070	0.4035	0.1064	0.4236	0.5650	0.4118
2/6/2018	0.4023	0.4023	0.4070	0.4035	0.4118	0.1064	0.4236	0.5650	0.4339
2/7/2018	0.4070	0.4070	0.4035	0.4118	0.4339	0.1064	0.4236	0.5650	0.4593
2/8/2018	0.4035	0.4035	0.4118	0.4339	0.4593	0.1064	0.4236	0.5650	0.4450
2/9/2018	0.4118	0.4118	0.4339	0.4593	0.4450	0.1064	0.4236	0.5650	0.4669
2/12/2018	0.4339	0.4339	0.4593	0.4450	0.4669	0.1064	0.4236	0.5650	0.4799
2/13/2018	0.4593	0.4593	0.4450	0.4669	0.4799	0.1064	0.4236	0.5650	0.4691
2/20/2018	0.4691	0.4691	0.4802	0.4843	0.4568	0.1202	0.4236	0.5650	0.4476
2/21/2018	0.4802	0.4802	0.4843	0.4568	0.4476	0.1202	0.4236	0.5650	0.4577
2/22/2018	0.4843	0.4843	0.4568	0.4476	0.4577	0.1202	0.4236	0.5650	0.4606
2/23/2018	0.4568	0.4568	0.4476	0.4577	0.4606	0.1202	0.4236	0.5650	0.4869
2/26/2018	0.4476	0.4476	0.4577	0.4606	0.4869	0.1202	0.4236	0.5650	0.4884
2/27/2018	0.4577	0.4577	0.4606	0.4869	0.4884	0.1202	0.4236	0.5650	0.4850
2/28/2018	0.4606	0.4606	0.4869	0.4884	0.4850	0.1202	0.4236	0.5650	0.4821
3/1/2018	0.4869	0.4869	0.4884	0.4850	0.4821	0.1202	0.4236	0.3395	0.5002



3/2/2018	0.4884	0.4884	0.4850	0.4821	0.5002	0.1202	0.4236	0.3395	0.5274
3/5/2018	0.4850	0.4850	0.4821	0.5002	0.5274	0.1202	0.4236	0.3395	0.5125
3/6/2018	0.4821	0.4821	0.5002	0.5274	0.5125	0.1202	0.4236	0.3395	0.5106
3/7/2018	0.5002	0.5002	0.5274	0.5125	0.5106	0.1202	0.4236	0.3395	0.5138
3/8/2018	0.5274	0.5274	0.5125	0.5106	0.5138	0.1202	0.4236	0.3395	0.5179
3/9/2018	0.5125	0.5125	0.5106	0.5138	0.5179	0.1202	0.4236	0.3395	0.5214
3/12/2018	0.5106	0.5106	0.5138	0.5179	0.5214	0.1202	0.4236	0.3395	0.5277
3/13/2018	0.5138	0.5138	0.5179	0.5214	0.5277	0.1202	0.4236	0.3395	0.5195
3/14/2018	0.5179	0.5179	0.5214	0.5277	0.5195	0.1202	0.4236	0.3395	0.5160
3/15/2018	0.5214	0.5214	0.5277	0.5195	0.5160	0.1202	0.4236	0.3395	0.5103
3/16/2018	0.5277	0.5277	0.5195	0.5160	0.5103	0.1202	0.4236	0.3395	0.5132
3/19/2018	0.5195	0.5195	0.5160	0.5103	0.5132	0.1202	0.4236	0.3395	0.5185
3/20/2018	0.5160	0.5160	0.5103	0.5132	0.5185	0.1202	0.4236	0.3395	0.5185
3/21/2018	0.5103	0.5103	0.5132	0.5185	0.5185	0.1202	0.4236	0.3395	0.5173
3/22/2018	0.5132	0.5132	0.5185	0.5185	0.5173	0.1202	0.4236	0.3395	0.5166
3/23/2018	0.5185	0.5185	0.5185	0.5173	0.5166	0.1202	0.4236	0.3395	0.5097
3/26/2018	0.5185	0.5185	0.5173	0.5166	0.5097	0.1202	0.4236	0.3395	0.5233
3/27/2018	0.5173	0.5173	0.5166	0.5097	0.5233	0.1202	0.4236	0.3395	0.5220
3/28/2018	0.5166	0.5166	0.5097	0.5233	0.5220	0.1202	0.4236	0.3395	0.5005
3/29/2018	0.5097	0.5097	0.5233	0.5220	0.5005	0.1402	0.3427	0.3395	0.5122
4/2/2018	0.5233	0.5233	0.5220	0.5005	0.5122	0.1402	0.3427	0.9169	0.5157
4/3/2018	0.5220	0.5220	0.5005	0.5122	0.5157	0.1402	0.3427	0.9169	0.5138
4/4/2018	0.5005	0.5005	0.5122	0.5157	0.5138	0.1402	0.3427	0.9169	0.5185
4/5/2018	0.5122	0.5122	0.5157	0.5138	0.5185	0.1402	0.3427	0.9169	0.5170
4/6/2018	0.5157	0.5157	0.5138	0.5185	0.5170	0.1402	0.3427	0.9169	0.5192
4/9/2018	0.5138	0.5138	0.5185	0.5170	0.5192	0.1402	0.3427	0.9169	0.5204
4/10/2018	0.5185	0.5185	0.5170	0.5192	0.5204	0.1402	0.3427	0.9169	0.5204
4/11/2018	0.5170	0.5170	0.5192	0.5204	0.5204	0.1402	0.3427	0.9169	0.5166
4/16/2018	0.5204	0.5204	0.5166	0.5128	0.5179	0.1402	0.3427	0.9169	0.5147
4/17/2018	0.5166	0.5166	0.5128	0.5179	0.5147	0.1402	0.3427	0.9169	0.5189
4/18/2018	0.5128	0.5128	0.5179	0.5147	0.5189	0.1402	0.3427	0.9169	0.5201
4/19/2018	0.5179	0.5179	0.5147	0.5189	0.5201	0.1402	0.3427	0.9169	0.5201
4/20/2018	0.5147	0.5147	0.5189	0.5201	0.5201	0.1402	0.3427	0.9169	0.5227
4/23/2018	0.5189	0.5189	0.5201	0.5201	0.5227	0.1402	0.3427	0.9169	0.5309
4/24/2018	0.5201	0.5201	0.5201	0.5227	0.5309	0.1402	0.3427	0.9169	0.5594
4/25/2018	0.5201	0.5201	0.5227	0.5309	0.5594	0.1402	0.3427	0.9169	0.5613
4/26/2018	0.5227	0.5227	0.5309	0.5594	0.5613	0.1402	0.3427	0.9169	0.5575
4/27/2018	0.5309	0.5309	0.5594	0.5613	0.5575	0.1402	0.3427	0.9169	0.5708
4/30/2018	0.5594	0.5594	0.5613	0.5575	0.5708	0.1402	0.3427	0.9169	0.5547
5/2/2018	0.5613	0.5613	0.5575	0.5708	0.5547	0.1402	0.3427	0.8393	0.5540
5/3/2018	0.5575	0.5575	0.5708	0.5547	0.5540	0.1402	0.3427	0.8393	0.5727
5/4/2018	0.5708	0.5708	0.5547	0.5540	0.5727	0.1402	0.3427	0.8393	0.5819
5/7/2018	0.5547	0.5547	0.5540	0.5727	0.5819	0.1402	0.3427	0.8393	0.5749
5/8/2018	0.5540	0.5540	0.5727	0.5819	0.5749	0.1402	0.3427	0.8393	0.5791
5/9/2018	0.5727	0.5727	0.5819	0.5749	0.5791	0.1402	0.3427	0.8393	0.6044
5/11/2018	0.5819	0.5819	0.5749	0.5791	0.6044	0.1402	0.3427	0.8393	0.6164
5/14/2018	0.5749	0.5749	0.5791	0.6044	0.6164	0.1402	0.3427	0.8393	0.6082
5/15/2018	0.5791	0.5791	0.6044	0.6164	0.6082	0.1402	0.3427	0.8393	0.5854
5/16/2018	0.6044	0.6044	0.6164	0.6082	0.5854	0.2460	0.3427	0.8393	0.5993
5/21/2018	0.5854	0.5854	0.5993	0.6228	0.6164	0.2460	0.3427	0.8393	0.6269
5/22/2018	0.5993	0.5993	0.6228	0.6164	0.6269	0.2460	0.3427	0.8393	0.6488
5/23/2018	0.6228	0.6228	0.6164	0.6269	0.6488	0.2460	0.3427	0.8393	0.6494
5/28/2018	0.6488	0.6488	0.6494	0.6538	0.6580	0.2460	0.3427	0.8393	0.6456
5/30/2018	0.6494	0.6494	0.6538	0.6580	0.6456	0.2460	0.3427	0.8393	0.6136
5/31/2018	0.6538	0.6538	0.6580	0.6456	0.6136	0.2460	0.3427	0.8393	0.6031



6/4/2018	0.6580	0.6580	0.6456	0.6136	0.6031	0.2460	0.3427	0.1438	0.5775
6/5/2018	0.6456	0.6456	0.6136	0.6031	0.5775	0.2460	0.3427	0.1438	0.5524
6/6/2018	0.6136	0.6136	0.6031	0.5775	0.5524	0.2460	0.3427	0.1438	0.5572
6/7/2018	0.6031	0.6031	0.5775	0.5524	0.5572	0.2460	0.3427	0.1438	0.5534
6/8/2018	0.5775	0.5775	0.5524	0.5572	0.5534	0.2460	0.3427	0.1438	0.5512
6/21/2018	0.5524	0.5524	0.5572	0.5534	0.5512	0.2460	0.3427	0.1438	0.5620
6/22/2018	0.5572	0.5572	0.5534	0.5512	0.5620	0.2460	0.3427	0.1438	0.6215
6/25/2018	0.5534	0.5534	0.5512	0.5620	0.6215	0.2460	0.3427	0.1438	0.6253
6/26/2018	0.5512	0.5512	0.5620	0.6215	0.6253	0.2460	0.3427	0.1438	0.6263
6/28/2018	0.5620	0.5620	0.6215	0.6253	0.6263	0.2460	0.3427	0.1438	0.6446
6/29/2018	0.6215	0.6215	0.6253	0.6263	0.6446	0.2460	0.3427	0.1438	0.6789
7/9/2018	0.6979	0.6979	0.7254	0.7017	0.7156	0.2460	0.3427	0.9442	0.7226
7/10/2018	0.7254	0.7254	0.7017	0.7156	0.7226	0.2460	0.3427	0.9442	0.6982
7/11/2018	0.7017	0.7017	0.7156	0.7226	0.6982	0.2460	0.3427	0.9442	0.6963
7/12/2018	0.7156	0.7156	0.7226	0.6982	0.6963	0.3152	0.3427	0.9442	0.7169
7/13/2018	0.7226	0.7226	0.6982	0.6963	0.7169	0.3152	0.3427	0.9442	0.7308
7/16/2018	0.6982	0.6982	0.6963	0.7169	0.7308	0.3152	0.3427	0.9442	0.7064
7/17/2018	0.6963	0.6963	0.7169	0.7308	0.7064	0.3152	0.3427	0.9442	0.7185
7/18/2018	0.7169	0.7169	0.7308	0.7064	0.7185	0.3152	0.3427	0.9442	0.7169
7/19/2018	0.7308	0.7308	0.7064	0.7185	0.7169	0.3152	0.3427	0.9442	0.7216
7/20/2018	0.7064	0.7064	0.7185	0.7169	0.7216	0.3152	0.3427	0.9442	0.7254
7/23/2018	0.7185	0.7185	0.7169	0.7216	0.7254	0.3152	0.3427	0.9442	0.7578
7/24/2018	0.7169	0.7169	0.7216	0.7254	0.7578	0.3152	0.3427	0.9442	0.7368
7/25/2018	0.7216	0.7216	0.7254	0.7578	0.7368	0.3152	0.3427	0.9442	0.7644
7/26/2018	0.7254	0.7254	0.7578	0.7368	0.7644	0.3152	0.3427	0.9442	0.7562
7/27/2018	0.7578	0.7578	0.7368	0.7644	0.7562	0.3152	0.3427	0.9442	0.7334
7/30/2018	0.7368	0.7368	0.7644	0.7562	0.7334	0.3152	0.3427	0.9442	0.7460
7/31/2018	0.7644	0.7644	0.7562	0.7334	0.7460	0.3152	0.3427	0.9442	0.7226
8/1/2018	0.7562	0.7562	0.7334	0.7460	0.7226	0.3152	0.3427	0.7433	0.7239
8/2/2018	0.7334	0.7334	0.7460	0.7226	0.7239	0.3152	0.3427	0.7433	0.7330
8/3/2018	0.7460	0.7460	0.7226	0.7239	0.7330	0.3152	0.3427	0.7433	0.7343
8/6/2018	0.7226	0.7226	0.7239	0.7330	0.7343	0.3152	0.3427	0.7433	0.7524
8/7/2018	0.7239	0.7239	0.7330	0.7343	0.7524	0.3152	0.3427	0.7433	0.7454
8/8/2018	0.7330	0.7330	0.7343	0.7524	0.7454	0.3152	0.3427	0.7433	0.7467
8/9/2018	0.7343	0.7343	0.7524	0.7454	0.7467	0.3152	0.3427	0.7433	0.7321
8/10/2018	0.7524	0.7524	0.7454	0.7467	0.7321	0.3152	0.3427	0.7433	0.7267
8/13/2018	0.7454	0.7454	0.7467	0.7321	0.7267	0.3152	0.3427	0.7433	0.7315
8/14/2018	0.7467	0.7467	0.7321	0.7267	0.7315	0.3152	0.3427	0.7433	0.7777
8/15/2018	0.7321	0.7321	0.7267	0.7315	0.7777	0.3152	0.3427	0.7433	0.7910
8/16/2018	0.7267	0.7267	0.7315	0.7777	0.7910	0.3152	0.3427	0.7433	0.7898
8/20/2018	0.7315	0.7315	0.7777	0.7910	0.7898	0.3152	0.3427	0.7433	0.7891
8/21/2018	0.7777	0.7777	0.7910	0.7898	0.7891	0.3152	0.3427	0.7433	0.7761
8/23/2018	0.7910	0.7910	0.7898	0.7891	0.7761	0.3152	0.3427	0.7433	0.7730
8/24/2018	0.7898	0.7898	0.7891	0.7761	0.7730	0.3152	0.3427	0.7433	0.7894
8/27/2018	0.7891	0.7891	0.7761	0.7730	0.7894	0.3152	0.3427	0.7433	0.8005
8/28/2018	0.7761	0.7761	0.7730	0.7894	0.8005	0.3548	0.2618	0.7433	0.7863
8/29/2018	0.7730	0.7730	0.7894	0.8005	0.7863	0.3548	0.2618	0.7433	0.7875
8/30/2018	0.7894	0.7894	0.8005	0.7863	0.7875	0.3548	0.2618	0.7433	0.7967
8/31/2018	0.8005	0.8005	0.7863	0.7875	0.7967	0.3548	0.2618	0.7433	0.8005
9/3/2018	0.7863	0.7863	0.7875	0.7967	0.8005	0.3548	0.2618	0.4799	0.8183
9/4/2018	0.7875	0.7875	0.7967	0.8005	0.8183	0.3548	0.2618	0.4799	0.8360
9/5/2018	0.7967	0.7967	0.8005	0.8183	0.8360	0.3548	0.2618	0.4799	0.8591
9/6/2018	0.8005	0.8005	0.8183	0.8360	0.8591	0.3548	0.2618	0.4799	0.8867
9/7/2018	0.8183	0.8183	0.8360	0.8591	0.8867	0.3548	0.2618	0.4799	0.8753
9/10/2018	0.8360	0.8360	0.8591	0.8867	0.8753	0.3548	0.2618	0.4799	0.8731



9/12/2018	0.8591	0.8591	0.8867	0.8753	0.8731	0.3548	0.2618	0.4799	0.8576
9/13/2018	0.8867	0.8867	0.8753	0.8731	0.8576	0.3548	0.2618	0.4799	0.8664
9/14/2018	0.8753	0.8753	0.8731	0.8576	0.8664	0.3548	0.2618	0.4799	0.8446
9/17/2018	0.8731	0.8731	0.8576	0.8664	0.8446	0.3548	0.2618	0.4799	0.8576
9/18/2018	0.8576	0.8576	0.8664	0.8446	0.8576	0.3548	0.2618	0.4799	0.8652
9/19/2018	0.8664	0.8664	0.8446	0.8576	0.8652	0.3548	0.2618	0.4799	0.8807
9/20/2018	0.8446	0.8446	0.8576	0.8652	0.8807	0.3548	0.2618	0.4799	0.8769
9/21/2018	0.8576	0.8576	0.8652	0.8807	0.8769	0.3548	0.2618	0.4799	0.8588
9/24/2018	0.8652	0.8652	0.8807	0.8769	0.8588	0.3548	0.2618	0.4799	0.8541
9/25/2018	0.8807	0.8807	0.8769	0.8588	0.8541	0.3548	0.2618	0.4799	0.8671
9/26/2018	0.8769	0.8769	0.8588	0.8541	0.8671	0.3548	0.2618	0.4799	0.8759
9/27/2018	0.8588	0.8588	0.8541	0.8671	0.8759	0.3548	0.2618	0.4799	0.8902
9/28/2018	0.8541	0.8541	0.8671	0.8759	0.8902	0.3548	0.2618	0.4799	0.8842
10/1/2018	0.8671	0.8671	0.8759	0.8902	0.8842	0.3548	0.2618	0.9030	0.8873
10/2/2018	0.8759	0.8759	0.8902	0.8842	0.8873	0.3548	0.2618	0.9030	0.8797
10/3/2018	0.8902	0.8902	0.8842	0.8873	0.8797	0.3548	0.2618	0.9030	0.9060
10/4/2018	0.8842	0.8842	0.8873	0.8797	0.9060	0.3548	0.2618	0.9030	0.9377
10/5/2018	0.8873	0.8873	0.8797	0.9060	0.9377	0.3548	0.2618	0.9030	0.9520
10/8/2018	0.8797	0.8797	0.9060	0.9377	0.9520	0.3548	0.2618	0.9030	0.9675
10/9/2018	0.9060	0.9060	0.9377	0.9520	0.9675	0.3548	0.2618	0.9030	0.9710
10/10/2018	0.9377	0.9377	0.9520	0.9675	0.9710	0.2709	0.1809	0.9030	0.9837
10/11/2018	0.9520	0.9520	0.9675	0.9710	0.9837	0.2709	0.1809	0.9030	0.9780
10/12/2018	0.9675	0.9675	0.9710	0.9837	0.9780	0.2709	0.1809	0.9030	0.9900
10/15/2018	0.9710	0.9710	0.9837	0.9780	0.9900	0.2709	0.1809	0.9030	0.9713
10/16/2018	0.9837	0.9837	0.9780	0.9900	0.9713	0.2709	0.1809	0.9030	0.9878
10/17/2018	0.9780	0.9780	0.9900	0.9713	0.9878	0.2709	0.1809	0.9030	0.9751
10/18/2018	0.9900	0.9900	0.9713	0.9878	0.9751	0.2709	0.1809	0.9030	0.9662
10/19/2018	0.9713	0.9713	0.9878	0.9751	0.9662	0.2709	0.1809	0.9030	0.9691
10/22/2018	0.9878	0.9878	0.9751	0.9662	0.9691	0.2709	0.1809	0.9030	0.9799
10/23/2018	0.9751	0.9751	0.9662	0.9691	0.9799	0.2709	0.1809	0.9030	0.9707
10/24/2018	0.9662	0.9662	0.9691	0.9799	0.9707	0.2709	0.1809	0.9030	0.9757
10/25/2018	0.9691	0.9691	0.9799	0.9707	0.9757	0.2709	0.1809	0.9030	0.9710
10/26/2018	0.9799	0.9799	0.9707	0.9757	0.9710	0.2709	0.1809	0.9030	0.9764
10/29/2018	0.9707	0.9707	0.9757	0.9710	0.9764	0.2709	0.1809	0.9030	0.9754
10/30/2018	0.9757	0.9757	0.9710	0.9764	0.9754	0.2709	0.1809	0.9030	0.9789
10/31/2018	0.9710	0.9710	0.9764	0.9754	0.9789	0.2709	0.1809	0.9030	0.9849
11/1/2018	0.9764	0.9764	0.9754	0.9789	0.9849	0.2709	0.1809	0.9900	0.9818
11/2/2018	0.9754	0.9754	0.9789	0.9849	0.9818	0.2709	0.1809	0.9900	0.9716
11/5/2018	0.9789	0.9789	0.9849	0.9818	0.9716	0.2709	0.1809	0.9900	0.9380
11/6/2018	0.9849	0.9849	0.9818	0.9716	0.9380	0.2709	0.1809	0.9900	0.9010
11/7/2018	0.9818	0.9818	0.9716	0.9380	0.9010	0.2709	0.1809	0.9900	0.8753
11/8/2018	0.9716	0.9716	0.9380	0.9010	0.8753	0.2709	0.1809	0.9900	0.8351
11/9/2018	0.9380	0.9380	0.9010	0.8753	0.8351	0.2709	0.1809	0.9900	0.7993
11/12/2018	0.9010	0.9010	0.8753	0.8351	0.7993	0.2709	0.1809	0.9900	0.7932
11/13/2018	0.8753	0.8753	0.8351	0.7993	0.7932	0.2709	0.1809	0.9900	0.8297
11/14/2018	0.8351	0.8351	0.7993	0.7932	0.8297	0.2709	0.1809	0.9900	0.8766
11/15/2018	0.7993	0.7993	0.7932	0.8297	0.8766	0.2709	0.1809	0.9900	0.8322
11/16/2018	0.7932	0.7932	0.8297	0.8766	0.8322	0.2709	0.1809	0.9900	0.8351
11/19/2018	0.8297	0.8297	0.8766	0.8322	0.8351	0.2709	0.1809	0.9900	0.7812
11/21/2018	0.8766	0.8766	0.8322	0.8351	0.7812	0.2709	0.1809	0.9900	0.7787
11/22/2018	0.8322	0.8322	0.8351	0.7812	0.7787	0.2709	0.1809	0.9900	0.7888
11/23/2018	0.8351	0.8351	0.7812	0.7787	0.7888	0.2329	0.1000	0.9900	0.7806
11/26/2018	0.7812	0.7812	0.7787	0.7888	0.7806	0.2329	0.1000	0.9900	0.7679
11/27/2018	0.7787	0.7787	0.7888	0.7806	0.7679	0.2329	0.1000	0.9900	0.7676
11/28/2018	0.7888	0.7888	0.7806	0.7679	0.7676	0.2329	0.1000	0.9900	0.7527



11/29/2018	0.7806	0.7806	0.7679	0.7676	0.7527	0.2329	0.1000	0.9900	0.7625
11/30/2018	0.7679	0.7679	0.7676	0.7527	0.7625	0.2329	0.1000	0.9900	0.7223
12/3/2018	0.7676	0.7676	0.7527	0.7625	0.7223	0.2329	0.1000	0.7912	0.7004
12/4/2018	0.7527	0.7527	0.7625	0.7223	0.7004	0.2329	0.1000	0.7912	0.6728
12/5/2018	0.7625	0.7625	0.7223	0.7004	0.6728	0.2329	0.1000	0.7912	0.6858
12/6/2018	0.7223	0.7223	0.7004	0.6728	0.6858	0.2329	0.1000	0.7912	0.7144
12/7/2018	0.7004	0.7004	0.6728	0.6858	0.7144	0.2329	0.1000	0.7912	0.7536
12/10/2018	0.6728	0.6728	0.6858	0.7144	0.7536	0.2329	0.1000	0.7912	0.7638
12/11/2018	0.6858	0.6858	0.7144	0.7536	0.7638	0.2329	0.1000	0.7912	0.7568
12/12/2018	0.7144	0.7144	0.7536	0.7638	0.7568	0.2329	0.1000	0.7912	0.7872
12/13/2018	0.7536	0.7536	0.7638	0.7568	0.7872	0.2329	0.1000	0.7912	0.7758
12/14/2018	0.7638	0.7638	0.7568	0.7872	0.7758	0.2329	0.1000	0.7912	0.7628
12/17/2018	0.7568	0.7568	0.7872	0.7758	0.7628	0.2329	0.1000	0.7912	0.7635
12/18/2018	0.7872	0.7872	0.7758	0.7628	0.7635	0.2329	0.1000	0.7912	0.7885
12/19/2018	0.7758	0.7758	0.7628	0.7635	0.7885	0.2329	0.1000	0.7912	0.7587
12/20/2018	0.7628	0.7628	0.7635	0.7885	0.7587	0.2329	0.1000	0.7912	0.7134
12/21/2018	0.7635	0.7635	0.7885	0.7587	0.7134	0.2329	0.1000	0.7912	0.7511
12/26/2018	0.7885	0.7885	0.7587	0.7134	0.7511	0.2329	0.1000	0.7912	0.7451
12/27/2018	0.7587	0.7587	0.7134	0.7511	0.7451	0.2329	0.1000	0.7912	0.7837
12/28/2018	0.7134	0.7134	0.7511	0.7451	0.7837	0.2329	0.1000	0.7912	0.7714
12/31/2018	0.7511	0.7511	0.7451	0.7837	0.7714	0.2329	0.1000	0.7912	0.7647
1/2/2019	0.7451	0.7451	0.7837	0.7714	0.7647	0.2329	0.1000	0.7948	0.7454
1/3/2019	0.7837	0.7837	0.7714	0.7647	0.7454	0.2329	0.1000	0.7948	0.7403
1/4/2019	0.7714	0.7714	0.7647	0.7454	0.7403	0.2329	0.1000	0.7948	0.7432
1/7/2019	0.7647	0.7647	0.7454	0.7403	0.7432	0.2329	0.1000	0.7948	0.7039
1/8/2019	0.7454	0.7454	0.7403	0.7432	0.7039	0.2329	0.1000	0.7948	0.6263
1/9/2019	0.7403	0.7403	0.7432	0.7039	0.6263	0.2329	0.1000	0.7948	0.6028
1/10/2019	0.7432	0.7432	0.7039	0.6263	0.6028	0.1772	0.1000	0.7948	0.6310
1/11/2019	0.7039	0.7039	0.6263	0.6028	0.6310	0.1772	0.1000	0.7948	0.6225
1/14/2019	0.6263	0.6263	0.6028	0.6310	0.6225	0.1772	0.1000	0.7948	0.6171
1/15/2019	0.6028	0.6028	0.6310	0.6225	0.6171	0.1772	0.1000	0.7948	0.6095
1/16/2019	0.6310	0.6310	0.6225	0.6171	0.6095	0.1772	0.1000	0.7948	0.6196
1/17/2019	0.6225	0.6225	0.6171	0.6095	0.6196	0.1772	0.1000	0.7948	0.6418
1/18/2019	0.6171	0.6171	0.6095	0.6196	0.6418	0.1772	0.1000	0.7948	0.6431
1/21/2019	0.6095	0.6095	0.6196	0.6418	0.6431	0.1772	0.1000	0.7948	0.6507
1/22/2019	0.6196	0.6196	0.6418	0.6431	0.6507	0.1772	0.1000	0.7948	0.6602
1/23/2019	0.6418	0.6418	0.6431	0.6507	0.6602	0.1772	0.1000	0.7948	0.6630
1/24/2019	0.6431	0.6431	0.6507	0.6602	0.6630	0.1772	0.1000	0.7948	0.6526
1/25/2019	0.6507	0.6507	0.6602	0.6630	0.6526	0.1772	0.1000	0.7948	0.6377
1/28/2019	0.6602	0.6602	0.6630	0.6526	0.6377	0.1772	0.1000	0.7948	0.6446
1/29/2019	0.6630	0.6630	0.6526	0.6377	0.6446	0.1772	0.1000	0.7948	0.6050
1/30/2019	0.6526	0.6526	0.6377	0.6446	0.6050	0.1772	0.1000	0.7948	0.6241
1/31/2019	0.6377	0.6377	0.6446	0.6050	0.6241	0.1772	0.1000	0.7948	0.6285
2/1/2019	0.6446	0.6446	0.6050	0.6241	0.6285	0.1772	0.1000	0.4700	0.6158
2/4/2019	0.6050	0.6050	0.6241	0.6285	0.6158	0.1772	0.1000	0.4700	0.5860
2/6/2019	0.6241	0.6241	0.6285	0.6158	0.5860	0.1772	0.1000	0.4700	0.5854
2/7/2019	0.6285	0.6285	0.6158	0.5860	0.5854	0.1772	0.1000	0.4700	0.5762
2/8/2019	0.6158	0.6158	0.5860	0.5854	0.5762	0.1772	0.1000	0.4700	0.5860
2/11/2019	0.5860	0.5860	0.5854	0.5762	0.5860	0.1772	0.1000	0.4700	0.5905
2/12/2019	0.5854	0.5854	0.5762	0.5860	0.5905	0.1772	0.1000	0.4700	0.5914
2/13/2019	0.5762	0.5762	0.5860	0.5905	0.5914	0.1772	0.1000	0.4700	0.6209
2/14/2019	0.5860	0.5860	0.5905	0.5914	0.6209	0.1772	0.1000	0.4700	0.6016
2/15/2019	0.5905	0.5905	0.5914	0.6209	0.6016	0.1772	0.1000	0.4700	0.6225
2/18/2019	0.5914	0.5914	0.6209	0.6016	0.6225	0.1772	0.1000	0.4700	0.6298
2/19/2019	0.6209	0.6209	0.6016	0.6225	0.6298	0.1772	0.1000	0.4700	0.6266



2/20/2019	0.6016	0.6016	0.6225	0.6298	0.6266	0.1772	0.1000	0.4700	0.6307
2/21/2019	0.6225	0.6225	0.6298	0.6266	0.6307	0.1772	0.1000	0.4700	0.6104
2/22/2019	0.6298	0.6298	0.6266	0.6307	0.6104	0.1845	0.1000	0.4700	0.6111
2/25/2019	0.6266	0.6266	0.6307	0.6104	0.6111	0.1845	0.1000	0.4700	0.6180
2/26/2019	0.6307	0.6307	0.6104	0.6111	0.6180	0.1845	0.1000	0.4700	0.5952
2/27/2019	0.6104	0.6104	0.6111	0.6180	0.5952	0.1845	0.1000	0.4700	0.5898
2/28/2019	0.6111	0.6111	0.6180	0.5952	0.5898	0.1845	0.1000	0.4700	0.5943
3/1/2019	0.6180	0.6180	0.5952	0.5898	0.5943	0.1845	0.1000	0.4028	0.6126
3/4/2019	0.5952	0.5952	0.5898	0.5943	0.6126	0.1845	0.1000	0.4028	0.6282
3/5/2019	0.5898	0.5898	0.5943	0.6126	0.6282	0.1845	0.1000	0.4028	0.6402
3/6/2019	0.5943	0.5943	0.6126	0.6282	0.6402	0.1845	0.1000	0.4028	0.6393
3/8/2019	0.6126	0.6126	0.6282	0.6402	0.6393	0.1845	0.1000	0.4028	0.6339
3/11/2019	0.6282	0.6282	0.6402	0.6393	0.6339	0.1845	0.1000	0.4028	0.6637
3/12/2019	0.6402	0.6402	0.6393	0.6339	0.6637	0.1845	0.1000	0.4028	0.6957
3/13/2019	0.6393	0.6393	0.6339	0.6637	0.6957	0.1845	0.1000	0.4028	0.6725
3/14/2019	0.6339	0.6339	0.6637	0.6957	0.6725	0.1845	0.1000	0.4028	0.6782
3/15/2019	0.6637	0.6637	0.6957	0.6725	0.6782	0.1845	0.1000	0.4028	0.6732
3/18/2019	0.6957	0.6957	0.6725	0.6782	0.6732	0.1845	0.1000	0.4028	0.6912
3/19/2019	0.6725	0.6725	0.6782	0.6732	0.6912	0.1845	0.1000	0.4028	0.6697
3/20/2019	0.6782	0.6782	0.6732	0.6912	0.6697	0.1845	0.1000	0.4028	0.6652
3/21/2019	0.6732	0.6732	0.6912	0.6697	0.6652	0.1845	0.1000	0.4028	0.6662
3/22/2019	0.6912	0.6912	0.6697	0.6652	0.6662	0.1845	0.1000	0.4028	0.6253
3/25/2019	0.6697	0.6697	0.6652	0.6662	0.6253	0.1845	0.1000	0.4028	0.6427
3/26/2019	0.6652	0.6652	0.6662	0.6253	0.6427	0.1845	0.1000	0.4028	0.6637
3/27/2019	0.6662	0.6662	0.6253	0.6427	0.6637	0.1845	0.1000	0.4028	0.6472
3/28/2019	0.6253	0.6253	0.6427	0.6637	0.6472	0.1845	0.1000	0.4028	0.6570
3/29/2019	0.6427	0.6427	0.6637	0.6472	0.6570	0.1845	0.1000	0.4028	0.6738
4/1/2019	0.6637	0.6637	0.6472	0.6570	0.6738	0.1845	0.1000	1.1047	0.6703
4/2/2019	0.6472	0.6472	0.6570	0.6738	0.6703	0.1845	0.1000	1.1047	0.6662
4/4/2019	0.6570	0.6570	0.6738	0.6703	0.6662	0.1845	0.1000	1.1047	0.6681
4/5/2019	0.6738	0.6738	0.6703	0.6662	0.6681	0.1845	0.1000	1.1047	0.6507
4/8/2019	0.6703	0.6703	0.6662	0.6681	0.6507	0.1845	0.1000	1.1047	0.6431
4/9/2019	0.6662	0.6662	0.6681	0.6507	0.6431	0.1845	0.1000	1.1047	0.6389
4/10/2019	0.6681	0.6681	0.6507	0.6431	0.6389	0.1217	0.1000	1.1047	0.6405
4/11/2019	0.6507	0.6507	0.6431	0.6389	0.6405	0.1217	0.1000	1.1047	0.6421
4/12/2019	0.6431	0.6431	0.6389	0.6405	0.6421	0.1217	0.1000	1.1047	0.6424
4/15/2019	0.6389	0.6389	0.6405	0.6421	0.6424	0.1217	0.1000	1.1047	0.6415
4/16/2019	0.6405	0.6405	0.6421	0.6424	0.6415	0.1217	0.1000	1.1047	0.6142
4/18/2019	0.6421	0.6421	0.6424	0.6415	0.6142	0.1217	0.1000	1.1047	0.6139
4/22/2019	0.6424	0.6424	0.6415	0.6142	0.6139	0.1217	0.1000	1.1047	0.5981
4/23/2019	0.6415	0.6415	0.6142	0.6139	0.5981	0.1217	0.1000	1.1047	0.6107
4/24/2019	0.6142	0.6142	0.6139	0.5981	0.6107	0.1217	0.1000	1.1047	0.6183
4/25/2019	0.6139	0.6139	0.5981	0.6107	0.6183	0.1217	0.1000	1.1047	0.6285
4/26/2019	0.5981	0.5981	0.6107	0.6183	0.6285	0.1217	0.1000	1.1047	0.6418
4/29/2019	0.6107	0.6107	0.6183	0.6285	0.6418	0.1217	0.1000	1.1047	0.6526
4/30/2019	0.6183	0.6183	0.6285	0.6418	0.6526	0.1217	0.1000	1.1047	0.6526
5/2/2019	0.6285	0.6285	0.6418	0.6526	0.6526	0.1217	0.1000	0.5065	0.6611
5/3/2019	0.6418	0.6418	0.6526	0.6526	0.6611	0.1217	0.1000	0.5065	0.6706
5/6/2019	0.6526	0.6526	0.6526	0.6611	0.6706	0.1217	0.1000	0.5065	0.6823
5/7/2019	0.6526	0.6526	0.6611	0.6706	0.6823	0.1217	0.1000	0.5065	0.6906
5/8/2019	0.6611	0.6611	0.6706	0.6823	0.6906	0.1217	0.1000	0.5065	0.6909
5/9/2019	0.6706	0.6706	0.6823	0.6906	0.6909	0.1217	0.1000	0.5065	0.6896
5/10/2019	0.6823	0.6823	0.6906	0.6909	0.6896	0.1217	0.1000	0.5065	0.7001
5/13/2019	0.6906	0.6906	0.6909	0.6896	0.7001	0.1217	0.1000	0.5065	0.7029
5/14/2019	0.6909	0.6909	0.6896	0.7001	0.7029	0.1217	0.1000	0.5065	0.7077



5/15/2019	0.6896	0.6896	0.7001	0.7029	0.7077	0.1217	0.1000	0.5065	0.7337
5/16/2019	0.7001	0.7001	0.7029	0.7077	0.7337	0.1217	0.1000	0.5065	0.7349
5/17/2019	0.7029	0.7029	0.7077	0.7337	0.7349	0.1217	0.1000	0.5065	0.7381
5/20/2019	0.7077	0.7077	0.7337	0.7349	0.7381	0.1217	0.1000	0.5065	0.7416
5/21/2019	0.7337	0.7337	0.7349	0.7381	0.7416	0.1217	0.1000	0.5065	0.7444
5/22/2019	0.7349	0.7349	0.7381	0.7416	0.7444	0.1217	0.1000	0.5065	0.7394
5/23/2019	0.7381	0.7381	0.7416	0.7444	0.7394	0.1217	0.1000	0.5065	0.7476
5/24/2019	0.7416	0.7416	0.7444	0.7394	0.7476	0.1217	0.1000	0.5065	0.7555
5/27/2019	0.7444	0.7444	0.7394	0.7476	0.7555	0.1781	0.0191	0.5065	0.7359
5/28/2019	0.7394	0.7394	0.7476	0.7555	0.7359	0.1781	0.0191	0.5065	0.7071
5/29/2019	0.7476	0.7476	0.7555	0.7359	0.7071	0.1781	0.0191	0.5065	0.7134
5/31/2019	0.7555	0.7555	0.7359	0.7071	0.7134	0.1781	0.0191	0.5065	0.7251
6/10/2019	0.7359	0.7359	0.7071	0.7134	0.7251	0.1781	0.0191	0.4734	0.7150
6/11/2019	0.7071	0.7071	0.7134	0.7251	0.7150	0.1781	0.0191	0.4734	0.6662
6/12/2019	0.7134	0.7134	0.7251	0.7150	0.6662	0.1781	0.0191	0.4734	0.6747
6/13/2019	0.7251	0.7251	0.7150	0.6662	0.6747	0.1781	0.0191	0.4734	0.6671
6/14/2019	0.7150	0.7150	0.6662	0.6747	0.6671	0.1781	0.0191	0.4734	0.6785
6/17/2019	0.6662	0.6662	0.6747	0.6671	0.6785	0.1781	0.0191	0.4734	0.6893
6/18/2019	0.6747	0.6747	0.6671	0.6785	0.6893	0.1781	0.0191	0.4734	0.7026
6/19/2019	0.6671	0.6671	0.6785	0.6893	0.7026	0.1781	0.0191	0.4734	0.6988
6/20/2019	0.6785	0.6785	0.6893	0.7026	0.6988	0.1781	0.0191	0.4734	0.6789
6/21/2019	0.6893	0.6893	0.7026	0.6988	0.6789	0.1781	0.0191	0.4734	0.6678
6/24/2019	0.7026	0.7026	0.6988	0.6789	0.6678	0.1781	0.0191	0.4734	0.6298
6/25/2019	0.6988	0.6988	0.6789	0.6678	0.6298	0.1781	0.0191	0.4734	0.6453
6/26/2019	0.6789	0.6789	0.6678	0.6298	0.6453	0.1781	0.0191	0.4734	0.6367
6/27/2019	0.6678	0.6678	0.6298	0.6453	0.6367	0.1781	0.0191	0.4734	0.6481
6/28/2019	0.6298	0.6298	0.6453	0.6367	0.6481	0.1781	0.0191	0.4734	0.6500
7/1/2019	0.6453	0.6453	0.6367	0.6481	0.6500	0.1781	0.0191	0.5663	0.6377
7/2/2019	0.6367	0.6367	0.6481	0.6500	0.6377	0.1781	0.0191	0.5663	0.6301
7/3/2019	0.6481	0.6481	0.6500	0.6377	0.6301	0.1781	0.0191	0.5663	0.6374
7/4/2019	0.6500	0.6500	0.6377	0.6301	0.6374	0.1781	0.0191	0.5663	0.6437
7/5/2019	0.6377	0.6377	0.6301	0.6374	0.6437	0.1781	0.0191	0.5663	0.6266
7/8/2019	0.6301	0.6301	0.6374	0.6437	0.6266	0.1781	0.0191	0.5663	0.6399
7/9/2019	0.6374	0.6374	0.6437	0.6266	0.6399	0.1781	0.0191	0.5663	0.6396
7/10/2019	0.6437	0.6437	0.6266	0.6399	0.6396	0.1781	0.0191	0.5663	0.6339
7/11/2019	0.6266	0.6266	0.6399	0.6396	0.6339	0.1781	0.0191	0.5663	0.6412
7/12/2019	0.6399	0.6399	0.6396	0.6339	0.6412	0.1781	0.0191	0.5663	0.6212
7/15/2019	0.6396	0.6396	0.6339	0.6412	0.6212	0.1781	0.0191	0.5663	0.6199
7/16/2019	0.6339	0.6339	0.6412	0.6212	0.6199	0.1781	0.0191	0.5663	0.5835
7/17/2019	0.6412	0.6412	0.6212	0.6199	0.5835	0.1330	0.0191	0.5663	0.5692
7/18/2019	0.6212	0.6212	0.6199	0.5835	0.5692	0.1330	0.0191	0.5663	0.5768
7/19/2019	0.6199	0.6199	0.5835	0.5692	0.5768	0.1330	0.0191	0.5663	0.5854
7/22/2019	0.5835	0.5835	0.5692	0.5768	0.5854	0.1330	0.0191	0.5663	0.5654
7/23/2019	0.5692	0.5692	0.5768	0.5854	0.5654	0.1330	0.0191	0.5663	0.5813
7/24/2019	0.5768	0.5768	0.5854	0.5654	0.5813	0.1330	0.0191	0.5663	0.5844
7/25/2019	0.5854	0.5854	0.5654	0.5813	0.5844	0.1330	0.0191	0.5663	0.5965
7/26/2019	0.5654	0.5654	0.5813	0.5844	0.5965	0.1330	0.0191	0.5663	0.5886
7/29/2019	0.5813	0.5813	0.5844	0.5965	0.5886	0.1330	0.0191	0.5663	0.5933
7/30/2019	0.5844	0.5844	0.5965	0.5886	0.5933	0.1330	0.0191	0.5663	0.5962
7/31/2019	0.5965	0.5965	0.5886	0.5933	0.5962	0.1330	0.0191	0.5663	0.6038
8/1/2019	0.5886	0.5886	0.5933	0.5962	0.6038	0.1330	0.0191	0.5283	0.6012
8/2/2019	0.5933	0.5933	0.5962	0.6038	0.6012	0.1330	0.0191	0.5283	0.6241
8/5/2019	0.5962	0.5962	0.6038	0.6012	0.6241	0.1330	0.0191	0.5283	0.6573
8/6/2019	0.6038	0.6038	0.6012	0.6241	0.6573	0.1330	0.0191	0.5283	0.6662
8/7/2019	0.6012	0.6012	0.6241	0.6573	0.6662	0.1330	0.0191	0.5283	0.7020



8/8/2019	0.6241	0.6241	0.6573	0.6662	0.7020	0.1330	0.0191	0.5283	0.6801
8/9/2019	0.6573	0.6573	0.6662	0.7020	0.6801	0.1330	0.0191	0.5283	0.6662
8/12/2019	0.6662	0.6662	0.7020	0.6801	0.6662	0.1330	0.0191	0.5283	0.6548
8/13/2019	0.7020	0.7020	0.6801	0.6662	0.6548	0.1330	0.0191	0.5283	0.6627
8/14/2019	0.6801	0.6801	0.6662	0.6548	0.6627	0.1330	0.0191	0.5283	0.6827
8/15/2019	0.6662	0.6662	0.6548	0.6627	0.6827	0.1330	0.0191	0.5283	0.6671
8/16/2019	0.6548	0.6548	0.6627	0.6827	0.6671	0.1330	0.0191	0.5283	0.6868
8/19/2019	0.6627	0.6627	0.6827	0.6671	0.6868	0.1330	0.0191	0.5283	0.6747
8/20/2019	0.6827	0.6827	0.6671	0.6868	0.6747	0.1330	0.0191	0.5283	0.6573
8/21/2019	0.6671	0.6671	0.6868	0.6747	0.6573	0.1330	0.0191	0.5283	0.6760
8/22/2019	0.6868	0.6868	0.6747	0.6573	0.6760	0.1330	0.0191	0.5283	0.6751
8/23/2019	0.6747	0.6747	0.6573	0.6760	0.6751	0.1330	0.0191	0.5283	0.6671
8/26/2019	0.6573	0.6573	0.6760	0.6751	0.6671	0.1330	0.0191	0.5283	0.6719
8/27/2019	0.6760	0.6760	0.6751	0.6671	0.6719	0.1330	0.0191	0.5283	0.6757
8/28/2019	0.6751	0.6751	0.6671	0.6719	0.6757	0.1330	0.0191	0.5283	0.6675
8/29/2019	0.6671	0.6671	0.6719	0.6757	0.6675	0.1028	0.0191	0.5283	0.6763
8/30/2019	0.6719	0.6719	0.6757	0.6675	0.6763	0.1028	0.0191	0.5283	0.6735
9/2/2019	0.6757	0.6757	0.6675	0.6763	0.6735	0.1028	0.0191	0.5899	0.6681
9/3/2019	0.6675	0.6675	0.6763	0.6735	0.6681	0.1028	0.0191	0.5899	0.6532
9/4/2019	0.6763	0.6763	0.6735	0.6681	0.6532	0.1028	0.0191	0.5899	0.6618
9/5/2019	0.6735	0.6735	0.6681	0.6532	0.6618	0.1028	0.0191	0.5899	0.6621
9/6/2019	0.6681	0.6681	0.6532	0.6618	0.6621	0.1028	0.0191	0.5899	0.6415
9/9/2019	0.6532	0.6532	0.6618	0.6621	0.6415	0.1028	0.0191	0.5899	0.6374
9/10/2019	0.6618	0.6618	0.6621	0.6415	0.6374	0.1028	0.0191	0.5899	0.6222
9/11/2019	0.6621	0.6621	0.6415	0.6374	0.6222	0.1028	0.0191	0.5899	0.6028
9/12/2019	0.6415	0.6415	0.6374	0.6222	0.6028	0.1028	0.0191	0.5899	0.6130
9/13/2019	0.6374	0.6374	0.6222	0.6028	0.6130	0.1028	0.0191	0.5899	0.6095
9/16/2019	0.6222	0.6222	0.6028	0.6130	0.6095	0.1028	0.0191	0.5899	0.5772
9/17/2019	0.6028	0.6028	0.6130	0.6095	0.5772	0.1028	0.0191	0.5899	0.5993
9/18/2019	0.6130	0.6130	0.6095	0.5772	0.5993	0.1028	0.0191	0.5899	0.6247
9/19/2019	0.6095	0.6095	0.5772	0.5993	0.6247	0.1028	0.0191	0.5899	0.6183
9/20/2019	0.5772	0.5772	0.5993	0.6247	0.6183	0.1028	0.0191	0.5899	0.6244
9/23/2019	0.5993	0.5993	0.6247	0.6183	0.6244	0.1028	0.0191	0.5899	0.6199
9/24/2019	0.6247	0.6247	0.6183	0.6244	0.6199	0.1028	0.0191	0.5899	0.6174
9/25/2019	0.6183	0.6183	0.6244	0.6199	0.6174	0.1028	0.0191	0.5899	0.6244
9/26/2019	0.6244	0.6244	0.6199	0.6174	0.6244	0.1028	0.0191	0.5899	0.6355
9/27/2019	0.6199	0.6199	0.6174	0.6244	0.6355	0.1028	0.0191	0.5899	0.6443
9/30/2019	0.6174	0.6174	0.6244	0.6355	0.6443	0.1028	0.0191	0.5899	0.6554
10/1/2019	0.6244	0.6244	0.6355	0.6443	0.6554	0.1028	0.0191	0.5166	0.6481
10/2/2019	0.6355	0.6355	0.6443	0.6554	0.6481	0.1028	0.0191	0.5166	0.6551
10/3/2019	0.6443	0.6443	0.6554	0.6481	0.6551	0.1028	0.0191	0.5166	0.6586
10/4/2019	0.6554	0.6554	0.6481	0.6551	0.6586	0.1028	0.0191	0.5166	0.6542
10/7/2019	0.6481	0.6481	0.6551	0.6586	0.6542	0.1028	0.0191	0.5166	0.6358
10/8/2019	0.6551	0.6551	0.6586	0.6542	0.6358	0.1129	0.0618	0.5166	0.6424
10/9/2019	0.6586	0.6586	0.6542	0.6358	0.6424	0.1129	0.0618	0.5166	0.6469
10/10/2019	0.6542	0.6542	0.6358	0.6424	0.6469	0.1129	0.0618	0.5166	0.6507
10/11/2019	0.6358	0.6358	0.6424	0.6469	0.6507	0.1129	0.0618	0.5166	0.6427
10/14/2019	0.6424	0.6424	0.6469	0.6507	0.6427	0.1129	0.0618	0.5166	0.6370
10/15/2019	0.6469	0.6469	0.6507	0.6427	0.6370	0.1129	0.0618	0.5166	0.6329
10/16/2019	0.6507	0.6507	0.6427	0.6370	0.6329	0.1129	0.0618	0.5166	0.6374
10/17/2019	0.6427	0.6427	0.6370	0.6329	0.6374	0.1129	0.0618	0.5166	0.6522
10/18/2019	0.6370	0.6370	0.6329	0.6374	0.6522	0.1129	0.0618	0.5166	0.6475
10/21/2019	0.6329	0.6329	0.6374	0.6522	0.6475	0.1129	0.0618	0.5166	0.6374
10/22/2019	0.6374	0.6374	0.6522	0.6475	0.6374	0.1129	0.0618	0.5166	0.6348
10/23/2019	0.6522	0.6522	0.6475	0.6374	0.6348	0.1129	0.0618	0.5166	0.6114



10/24/2019	0.6475	0.6475	0.6374	0.6348	0.6114	0.1129	0.0618	0.5166	0.6092
10/25/2019	0.6374	0.6374	0.6348	0.6114	0.6092	0.1129	0.0618	0.5166	0.5917
10/28/2019	0.6348	0.6348	0.6114	0.6092	0.5917	0.1129	0.0618	0.5166	0.6133
10/29/2019	0.6114	0.6114	0.6092	0.5917	0.6133	0.1129	0.0618	0.5166	0.6003
10/30/2019	0.6092	0.6092	0.5917	0.6133	0.6003	0.1129	0.0618	0.5166	0.6019
10/31/2019	0.5917	0.5917	0.6133	0.6003	0.6019	0.1129	0.0618	0.5166	0.6069
11/1/2019	0.6133	0.6133	0.6003	0.6019	0.6069	0.1129	0.0618	0.8692	0.5955
11/4/2019	0.6003	0.6003	0.6019	0.6069	0.5955	0.1129	0.0618	0.8692	0.6139
11/5/2019	0.6019	0.6019	0.6069	0.5955	0.6139	0.1129	0.0618	0.8692	0.5936
11/6/2019	0.6069	0.6069	0.5955	0.6139	0.5936	0.1129	0.0618	0.8692	0.6028
11/7/2019	0.5955	0.5955	0.6139	0.5936	0.6028	0.1129	0.0618	0.8692	0.5905
11/8/2019	0.6139	0.6139	0.5936	0.6028	0.5905	0.1129	0.0618	0.8692	0.6057
11/11/2019	0.5936	0.5936	0.6028	0.5905	0.6057	0.1129	0.0618	0.8692	0.5993
11/12/2019	0.6028	0.6028	0.5905	0.6057	0.5993	0.1129	0.0618	0.8692	0.6057
11/13/2019	0.5905	0.5905	0.6057	0.5993	0.6057	0.1129	0.0618	0.8692	0.6117
11/14/2019	0.6057	0.6057	0.5993	0.6057	0.6117	0.1129	0.0618	0.8692	0.6190
11/15/2019	0.5993	0.5993	0.6057	0.6117	0.6190	0.1129	0.0618	0.8692	0.6241
11/18/2019	0.6057	0.6057	0.6117	0.6190	0.6241	0.1129	0.0618	0.8692	0.6149
11/19/2019	0.6117	0.6117	0.6190	0.6241	0.6149	0.1129	0.0618	0.8692	0.6168
11/20/2019	0.6190	0.6190	0.6241	0.6149	0.6168	0.1000	0.0191	0.8692	0.6218
11/21/2019	0.6241	0.6241	0.6149	0.6168	0.6218	0.1000	0.0191	0.8692	0.6237
11/22/2019	0.6149	0.6149	0.6168	0.6218	0.6237	0.1000	0.0191	0.8692	0.6285
11/29/2019	0.6168	0.6168	0.6218	0.6237	0.6285	0.1000	0.0191	0.8692	0.6279

Lampiran 7. Hasil prediksi kurs terbaik pada tiap lapisan

Tanggal	Data Uji	Hasil Pengujian			
		3 -layer	4 -layer	5 -layer	6 -layer
07/12/2018	14,507	14,359.61	14,345.00	14,386.37	14,354.32
10/12/2018	14,539	14,474.85	14,465.12	14,511.85	14,474.81
11/12/2018	14,517	14,514.28	14,513.74	14,547.86	14,532.59
12/12/2018	14,613	14,498.57	14,497.07	14,519.16	14,501.53
13/12/2018	14,577	14,551.43	14,562.44	14,587.73	14,587.96
14/12/2018	14,536	14,538.24	14,550.63	14,574.04	14,570.13
17/12/2018	14,538	14,508.33	14,505.79	14,526.16	14,514.50
18/12/2018	14,617	14,494.96	14,486.41	14,521.69	14,499.85
19/12/2018	14,523	14,551.53	14,561.00	14,592.00	14,591.01
20/12/2018	14,380	14,502.39	14,501.15	14,528.11	14,511.55
21/12/2018	14,499	14,384.46	14,384.35	14,375.86	14,365.17
26/12/2018	14,480	14,441.54	14,423.43	14,468.14	14,429.43
27/12/2018	14,602	14,451.88	14,443.10	14,488.71	14,444.38
28/12/2018	14,563	14,548.13	14,559.50	14,581.32	14,580.82
31/12/2018	14,542	14,529.72	14,538.08	14,565.84	14,557.91
02/01/2019	14,481	14,513.22	14,513.03	14,531.28	14,521.80
03/01/2019	14,465	14,455.91	14,449.96	14,474.94	14,441.34
04/01/2019	14,474	14,437.63	14,429.34	14,454.26	14,423.10
07/01/2019	14,350	14,442.38	14,432.50	14,466.76	14,430.39
08/01/2019	14,105	14,355.43	14,352.91	14,357.52	14,342.76
09/01/2019	14,031	14,133.24	14,134.16	14,080.79	14,120.61
10/01/2019	14,120	14,017.94	14,001.68	13,990.62	14,012.78
11/01/2019	14,093	14,090.42	14,064.75	14,088.30	14,095.51
14/01/2019	14,076	14,107.42	14,098.00	14,106.07	14,108.84
15/01/2019	14,052	14,097.11	14,090.85	14,074.13	14,090.89
16/01/2019	14,084	14,062.76	14,052.46	14,050.14	14,061.40
17/01/2019	14,154	14,088.91	14,075.98	14,075.93	14,087.46
18/01/2019	14,158	14,157.02	14,143.52	14,163.05	14,155.76



Tanggal	Data Uji	Hasil Pengujian			
		3 -layer	4 -layer	5 -layer	6 -layer
21/01/2019	14,182	14,176.49	14,169.48	14,178.03	14,172.37
22/01/2019	14,212	14,195.89	14,188.07	14,194.12	14,188.51
23/01/2019	14,221	14,218.57	14,208.64	14,226.48	14,212.94
24/01/2019	14,188	14,231.59	14,223.69	14,238.40	14,224.58
25/01/2019	14,141	14,203.86	14,197.75	14,201.33	14,196.04
28/01/2019	14,163	14,154.97	14,147.65	14,142.81	14,147.95
29/01/2019	14,038	14,163.51	14,150.75	14,160.73	14,158.69
30/01/2019	14,098	14,060.92	14,056.22	14,044.34	14,058.80
31/01/2019	14,112	14,095.51	14,080.54	14,075.34	14,090.28
01/02/2019	14,072	14,115.98	14,104.37	14,107.97	14,111.38
04/02/2019	13,978	14,097.94	14,095.15	14,076.04	14,085.82
06/02/2019	13,976	14,000.52	13,997.34	13,989.53	13,990.24
07/02/2019	13,947	13,977.93	13,966.22	13,973.01	13,970.87
08/02/2019	13,978	13,953.29	13,942.75	13,954.33	13,951.02
11/02/2019	13,992	13,985.87	13,975.17	13,982.05	13,980.29
12/02/2019	13,995	14,004.12	13,994.70	14,003.30	14,000.09
13/02/2019	14,088	14,013.35	14,006.57	14,008.59	14,006.34
14/02/2019	14,027	14,093.70	14,081.66	14,081.38	14,086.18
15/02/2019	14,093	14,056.11	14,053.69	14,049.97	14,049.11
18/02/2019	14,116	14,104.53	14,095.73	14,080.19	14,091.63
19/02/2019	14,106	14,126.02	14,116.52	14,117.54	14,119.60
20/02/2019	14,119	14,129.40	14,125.57	14,110.29	14,117.02
21/02/2019	14,055	14,132.52	14,125.22	14,114.77	14,120.86
22/02/2019	14,057	14,076.27	14,071.95	14,058.45	14,066.52
25/02/2019	14,079	14,067.16	14,058.46	14,047.31	14,056.40
26/02/2019	14,007	14,084.18	14,072.93	14,070.79	14,077.62
27/02/2019	13,990	14,031.21	14,027.71	14,022.06	14,022.86
28/02/2019	14,004	14,002.26	13,994.35	13,992.54	13,992.89
01/03/2019	14,062	14,007.98	13,996.41	14,005.34	14,002.21
04/03/2019	14,111	14,069.74	14,058.93	14,060.96	14,062.11
05/03/2019	14,149	14,125.80	14,117.96	14,112.15	14,116.30
06/03/2019	14,146	14,167.53	14,162.02	14,158.40	14,154.72
08/03/2019	14,129	14,167.16	14,163.29	14,155.68	14,153.26
11/03/2019	14,223	14,147.84	14,143.39	14,129.48	14,133.34
12/03/2019	14,324	14,220.65	14,209.15	14,222.15	14,207.18
13/03/2019	14,251	14,319.47	14,310.18	14,347.10	14,306.45
14/03/2019	14,269	14,281.92	14,285.02	14,290.97	14,263.17
15/03/2019	14,253	14,276.79	14,272.29	14,276.27	14,255.20
18/03/2019	14,310	14,255.57	14,248.25	14,264.40	14,241.20
19/03/2019	14,242	14,306.39	14,298.35	14,320.78	14,288.72
20/03/2019	14,228	14,259.20	14,257.30	14,266.46	14,243.01
21/03/2019	14,231	14,238.32	14,233.74	14,231.64	14,218.46
22/03/2019	14,102	14,231.25	14,222.31	14,233.97	14,217.08
25/03/2019	14,157	14,128.65	14,128.31	14,104.38	14,113.64
26/03/2019	14,223	14,153.63	14,141.59	14,132.00	14,137.95
27/03/2019	14,171	14,216.63	14,203.41	14,227.48	14,208.24
28/03/2019	14,202	14,198.93	14,198.59	14,193.00	14,183.39
29/03/2019	14,255	14,211.51	14,205.02	14,202.51	14,193.82
01/04/2019	14,244	14,249.50	14,234.54	14,256.74	14,251.80
02/04/2019	14,231	14,255.59	14,247.33	14,253.97	14,254.46
04/04/2019	14,237	14,240.99	14,232.27	14,230.97	14,237.93
05/04/2019	14,182	14,238.20	14,226.16	14,233.79	14,237.41
08/04/2019	14,158	14,194.04	14,185.06	14,179.68	14,194.12



Tanggal	Data Uji	Hasil Pengujian			
		3 -layer	4 -layer	5 -layer	6 -layer
09/04/2019	14,145	14,164.96	14,153.58	14,143.25	14,164.61
10/04/2019	14,150	14,148.07	14,134.84	14,145.08	14,149.82
11/04/2019	14,155	14,155.05	14,142.28	14,153.22	14,156.41
12/04/2019	14,156	14,162.43	14,150.48	14,162.16	14,163.71
15/04/2019	14,153	14,165.64	14,154.60	14,164.14	14,166.19
16/04/2019	14,067	14,162.86	14,151.93	14,160.32	14,163.29
18/04/2019	14,066	14,087.06	14,079.80	14,066.42	14,088.42
22/04/2019	14,016	14,069.62	14,055.71	14,049.90	14,071.44
23/04/2019	14,056	14,023.21	14,010.20	14,020.93	14,030.75
24/04/2019	14,080	14,058.39	14,042.92	14,048.40	14,062.78
25/04/2019	14,112	14,086.23	14,071.87	14,082.86	14,093.26
26/04/2019	14,154	14,124.86	14,113.46	14,119.57	14,127.40
29/04/2019	14,188	14,163.50	14,151.47	14,166.08	14,165.42
30/04/2019	14,188	14,198.39	14,187.61	14,205.03	14,198.78
02/05/2019	14,215	14,205.76	14,201.41	14,202.14	14,191.46
03/05/2019	14,245	14,224.94	14,218.37	14,224.01	14,209.89
06/05/2019	14,282	14,251.29	14,244.08	14,258.91	14,237.17
07/05/2019	14,308	14,287.33	14,281.05	14,300.63	14,271.55
08/05/2019	14,309	14,312.65	14,307.36	14,330.25	14,295.94
09/05/2019	14,305	14,315.83	14,311.84	14,331.84	14,297.95
10/05/2019	14,338	14,309.85	14,305.23	14,323.38	14,291.61
13/05/2019	14,347	14,332.91	14,325.70	14,352.81	14,315.38
14/05/2019	14,362	14,345.38	14,339.96	14,369.11	14,328.08
15/05/2019	14,444	14,359.59	14,354.79	14,382.70	14,340.39
16/05/2019	14,448	14,421.50	14,413.41	14,458.63	14,402.87
17/05/2019	14,458	14,437.02	14,433.99	14,477.41	14,417.87
20/05/2019	14,469	14,445.21	14,442.74	14,479.45	14,422.30
21/05/2019	14,478	14,447.78	14,442.96	14,486.04	14,426.92
22/05/2019	14,462	14,455.89	14,451.42	14,495.09	14,434.66
23/05/2019	14,488	14,445.00	14,441.58	14,481.46	14,423.42
24/05/2019	14,513	14,460.59	14,454.92	14,499.53	14,438.95
27/05/2019	14,451	14,481.24	14,475.14	14,513.33	14,474.31
28/05/2019	14,360	14,442.28	14,441.08	14,461.06	14,423.31
29/05/2019	14,380	14,361.85	14,360.02	14,362.54	14,342.11
31/05/2019	14,417	14,358.61	14,347.99	14,371.54	14,342.99
10/06/2019	14,385	14,394.31	14,384.50	14,423.01	14,381.05
11/06/2019	14,231	14,384.65	14,381.93	14,400.95	14,367.76
12/06/2019	14,258	14,255.97	14,257.96	14,238.99	14,237.71
13/06/2019	14,234	14,246.55	14,234.46	14,239.85	14,231.36
14/06/2019	14,270	14,231.38	14,220.88	14,240.02	14,224.11
17/06/2019	14,304	14,272.37	14,264.59	14,275.31	14,258.67
18/06/2019	14,346	14,303.04	14,294.97	14,317.48	14,291.36
19/06/2019	14,334	14,345.08	14,338.99	14,361.26	14,330.58
20/06/2019	14,271	14,340.11	14,336.70	14,351.96	14,324.79
21/06/2019	14,236	14,285.49	14,283.55	14,281.58	14,268.93
24/06/2019	14,116	14,241.39	14,234.88	14,233.87	14,226.94
25/06/2019	14,165	14,133.10	14,129.02	14,108.46	14,122.57
26/06/2019	14,138	14,158.71	14,145.11	14,144.53	14,148.17
27/06/2019	14,174	14,145.51	14,136.07	14,141.74	14,141.06
28/06/2019	14,180	14,184.60	14,176.82	14,173.87	14,173.20
01/07/2019	14,141	14,190.21	14,181.84	14,184.81	14,183.93
02/07/2019	14,117	14,161.59	14,157.12	14,141.32	14,152.55
03/07/2019	14,140	14,130.08	14,122.59	14,105.39	14,122.08



Tanggal	Data Uji	Hasil Pengujian			
		3 -layer	4 -layer	5 -layer	6 -layer
04/07/2019	14,160	14,144.03	14,132.74	14,130.08	14,138.45
05/07/2019	14,106	14,168.92	14,159.49	14,160.65	14,163.31
08/07/2019	14,148	14,129.08	14,125.00	14,104.81	14,121.65
09/07/2019	14,147	14,153.39	14,142.74	14,135.87	14,145.34
10/07/2019	14,129	14,157.09	14,147.95	14,148.92	14,152.82
11/07/2019	14,152	14,147.85	14,142.24	14,126.55	14,139.46
12/07/2019	14,089	14,159.98	14,150.35	14,145.95	14,152.90
15/07/2019	14,085	14,109.42	14,104.24	14,084.77	14,103.78
16/07/2019	13,970	14,096.40	14,087.72	14,067.58	14,088.93
17/07/2019	13,925	13,989.57	13,984.67	13,988.99	13,986.54
18/07/2019	13,949	13,932.72	13,923.49	13,931.36	13,928.45
19/07/2019	13,976	13,943.54	13,927.58	13,951.64	13,946.30
22/07/2019	13,913	13,984.20	13,972.54	13,990.83	13,985.48
23/07/2019	13,963	13,937.55	13,933.45	13,939.74	13,936.30
24/07/2019	13,973	13,968.79	13,956.71	13,969.25	13,966.37
25/07/2019	14,011	13,983.30	13,972.43	13,991.47	13,985.53
26/07/2019	13,986	14,027.38	14,018.79	14,028.05	14,023.97
29/07/2019	14,001	14,007.18	14,001.01	14,010.22	14,004.97
30/07/2019	14,010	14,015.64	14,007.06	14,013.93	14,011.33
31/07/2019	14,034	14,022.00	14,012.21	14,024.24	14,020.43
01/08/2019	14,026	14,048.44	14,039.70	14,044.63	14,043.97
02/08/2019	14,098	14,044.54	14,037.63	14,041.00	14,040.03
05/08/2019	14,203	14,106.25	14,095.31	14,092.57	14,100.02
06/08/2019	14,231	14,207.11	14,195.71	14,220.54	14,201.25
07/08/2019	14,344	14,251.59	14,248.02	14,264.74	14,240.99
08/08/2019	14,275	14,342.54	14,335.14	14,366.24	14,327.89
09/08/2019	14,231	14,297.82	14,298.03	14,312.11	14,284.75
12/08/2019	14,195	14,249.52	14,247.80	14,240.64	14,231.07
13/08/2019	14,220	14,198.91	14,190.40	14,198.50	14,188.16
14/08/2019	14,283	14,219.32	14,208.85	14,225.24	14,208.89
15/08/2019	14,234	14,279.24	14,268.84	14,300.41	14,269.18
16/08/2019	14,296	14,254.32	14,252.27	14,261.39	14,241.84
19/08/2019	14,258	14,295.07	14,286.93	14,306.17	14,279.67
20/08/2019	14,203	14,268.02	14,262.89	14,282.79	14,257.34
21/08/2019	14,262	14,221.93	14,219.40	14,214.14	14,206.42
22/08/2019	14,259	14,254.10	14,242.07	14,266.13	14,242.57
23/08/2019	14,234	14,264.62	14,257.41	14,282.14	14,254.98
26/08/2019	14,249	14,250.16	14,246.81	14,251.60	14,235.56
27/08/2019	14,261	14,252.24	14,244.26	14,260.09	14,239.61
28/08/2019	14,235	14,264.51	14,256.77	14,278.08	14,253.15
29/08/2019	14,263	14,248.29	14,243.95	14,256.34	14,234.66
30/08/2019	14,254	14,265.47	14,257.68	14,276.42	14,251.56
02/09/2019	14,237	14,260.99	14,254.29	14,277.13	14,250.24
03/09/2019	14,190	14,248.54	14,243.36	14,256.33	14,235.47
04/09/2019	14,217	14,203.34	14,197.92	14,203.32	14,191.88
05/09/2019	14,218	14,218.02	14,207.99	14,222.25	14,207.23
06/09/2019	14,153	14,224.41	14,216.13	14,235.45	14,215.75
09/09/2019	14,140	14,175.04	14,172.05	14,168.47	14,163.65
10/09/2019	14,092	14,149.16	14,140.97	14,136.45	14,138.76
11/09/2019	14,031	14,103.48	14,095.42	14,087.69	14,097.36
12/09/2019	14,063	14,046.93	14,040.45	14,034.00	14,040.00
13/09/2019	14,052	14,063.96	14,050.87	14,053.52	14,059.45
16/09/2019	13,950	14,064.00	14,054.68	14,060.13	14,061.63



Tanggal	Data Uji	Hasil Pengujian			
		3 -layer	4 -layer	5 -layer	6 -layer
17/09/2019	14,020	13,977.54	13,975.45	13,975.12	13,972.00
18/09/2019	14,100	14,017.20	14,002.17	14,013.32	14,013.11
19/09/2019	14,080	14,100.52	14,085.71	14,100.20	14,101.42
20/09/2019	14,099	14,110.28	14,107.65	14,098.21	14,103.53
23/09/2019	14,085	14,117.63	14,111.30	14,099.78	14,108.27
24/09/2019	14,077	14,100.22	14,092.62	14,086.88	14,094.78
25/09/2019	14,099	14,093.06	14,085.87	14,077.29	14,085.88
26/09/2019	14,134	14,108.54	14,098.72	14,094.82	14,102.70
27/09/2019	14,162	14,144.34	14,134.92	14,139.97	14,138.22
30/09/2019	14,197	14,176.13	14,168.69	14,176.82	14,168.18
01/10/2019	14,174	14,209.83	14,203.16	14,213.44	14,198.67
02/10/2019	14,196	14,193.91	14,190.05	14,192.80	14,182.27
03/10/2019	14,207	14,206.24	14,199.23	14,204.86	14,193.37
04/10/2019	14,193	14,215.48	14,207.90	14,221.42	14,204.97
07/10/2019	14,135	14,208.48	14,203.57	14,209.01	14,196.02
08/10/2019	14,156	14,154.79	14,150.65	14,129.49	14,145.59
09/10/2019	14,170	14,160.64	14,150.54	14,141.81	14,152.62
10/10/2019	14,182	14,176.64	14,166.98	14,168.61	14,171.46
11/10/2019	14,157	14,195.68	14,189.02	14,183.92	14,187.31
14/10/2019	14,139	14,174.84	14,169.70	14,157.18	14,166.44
15/10/2019	14,126	14,153.65	14,147.18	14,130.91	14,145.15
16/10/2019	14,140	14,137.30	14,129.22	14,115.94	14,130.81
17/10/2019	14,187	14,149.14	14,140.05	14,131.78	14,142.83
18/10/2019	14,172	14,193.39	14,183.63	14,186.86	14,186.93
21/10/2019	14,140	14,190.88	14,186.00	14,179.03	14,183.19
22/10/2019	14,132	14,160.45	14,156.27	14,135.64	14,150.65
23/10/2019	14,058	14,142.50	14,134.28	14,120.51	14,135.22
24/10/2019	14,051	14,077.17	14,071.93	14,055.04	14,071.89
25/10/2019	13,996	14,060.01	14,050.53	14,040.40	14,054.38
28/10/2019	14,064	14,008.61	14,000.29	14,005.22	14,007.78
29/10/2019	14,023	14,066.47	14,053.32	14,054.21	14,063.10
30/10/2019	14,028	14,042.54	14,035.93	14,039.53	14,042.51
31/10/2019	14,044	14,046.48	14,039.81	14,031.24	14,040.45
01/11/2019	14,008	14,051.40	14,038.21	14,033.26	14,058.24
04/11/2019	14,066	14,026.78	14,018.28	14,008.50	14,032.26
05/11/2019	14,002	14,071.37	14,057.36	14,046.44	14,075.52
06/11/2019	14,031	14,022.96	14,015.29	14,008.72	14,030.40
07/11/2019	13,992	14,041.71	14,030.10	14,016.16	14,044.21
08/11/2019	14,040	14,004.69	13,993.82	13,995.08	14,013.47
11/11/2019	14,020	14,047.66	14,034.43	14,026.19	14,052.04
12/11/2019	14,040	14,035.08	14,024.72	14,021.38	14,042.94
13/11/2019	14,059	14,054.30	14,043.79	14,029.90	14,057.71
14/11/2019	14,082	14,069.48	14,057.38	14,048.29	14,075.49
15/11/2019	14,098	14,095.92	14,085.31	14,067.64	14,099.74
18/11/2019	14,069	14,112.63	14,102.58	14,080.51	14,115.73
19/11/2019	14,075	14,088.77	14,081.00	14,056.84	14,091.36
20/11/2019	14,091	14,086.36	14,075.83	14,068.19	14,085.71
21/11/2019	14,097	14,099.24	14,087.28	14,086.79	14,100.72
22/11/2019	14,112	14,110.66	14,100.86	14,097.06	14,110.72
29/11/2019	14,110	14,124.60	14,114.59	14,112.25	14,123.74