

FE515 2022A Assignment 1

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Question 1: (50 points)

1.1

Generate a vector x from 5 to 35 with increment 2, and calculate its length.

```
x = seq(5, 35, by = 2)
x

## [1] 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35
length(x)

## [1] 16
```

1.2

Use the vector x in 1.1 to generate a 4-by-4 matrix A which filled by rows.

```
A = matrix(x, nrow = 4, byrow = TRUE)
A

##      [,1] [,2] [,3] [,4]
## [1,] 5    7    9    11
## [2,] 13   15   17   19
## [3,] 21   23   25   27
## [4,] 29   31   33   35
```

1.3

Calculate the eigenvalues of the matrix A in 1.2.

```
eigen(A)

## eigen() decomposition
## $values
## [1] 8.381780e+01 -3.817805e+00 -3.786132e-15 6.672852e-16
##
## $vectors
##      [,1]      [,2]      [,3]      [,4]
## [1,] -0.1965115 0.7200875 0.3434067 0.07649765
## [2,] -0.3720770 0.2753987 -0.1398331 0.30225011
## [3,] -0.5476424 -0.1692902 -0.7505539 -0.83399317
## [4,] -0.7232079 -0.6139791 0.5469803 0.45524541
```

1.4

Change the 4 elements in first two rows and first two columns of the matrix A to 7. i.e. Let a11, a12, a21, a22 equal to 7.

```
A[c(1,2), c(1,2)] = 7
```

```
A
```

```
##      [,1] [,2] [,3] [,4]
## [1,]    7    7    9   11
## [2,]    7    7   17   19
## [3,]   21   23   25   27
## [4,]   29   31   33   35
```

1.5

Calculate the determinant of A in 1.4.

```
det(A)
```

```
## [1] 256
```

1.6

Calculate the inverse of A in 1.4.

```
solve(A)
```

```
##      [,1]      [,2]      [,3]      [,4]
## [1,]  0.500 -6.278503e-16 -1.5000  1.0000
## [2,] -0.375 -1.250000e-01  1.3750 -0.8750
## [3,] -0.750  2.500000e-01 -0.4375  0.4375
## [4,]  0.625 -1.250000e-01  0.4375 -0.4375
```

1.7

Create a vector b by assigning the first row of A in 1.4 to b.

```
b = A[1,]
```

```
b
```

```
## [1]  7  7  9 11
```

1.8

Find y by solving linear equation $A y = b$ with the A in 1.4 and b in 1.7. (Hint. y can be found by $y = A^{-1} b$ where A^{-1} is the inverse of A.)

```
y = solve(A) %% b
```

```
y
```

```
##      [,1]
## [1,]  1.000
## [2,] -0.750
## [3,] -2.625
## [4,]  2.625
```

1.9

For each element of y in 1.8 find the minimum between its value and $\pi/2$. Store all results into a single vector. Print the value of resulting vector.

```
v = y
v[ v < pi/2 ] = pi/2
v = c(v)
v
```

```
## [1] 1.570796 1.570796 1.570796 2.625000
```

1.10

Read the documentation for function `diag` and use the function to generate the following 10-by-10 square matrix.

```
diag(seq(1,10), 10, 10)
```

```
##      [,1] [,2] [,3] [,4] [,5] [,6] [,7] [,8] [,9] [,10]
## [1,]    1    0    0    0    0    0    0    0    0    0
## [2,]    0    2    0    0    0    0    0    0    0    0
## [3,]    0    0    3    0    0    0    0    0    0    0
## [4,]    0    0    0    4    0    0    0    0    0    0
## [5,]    0    0    0    0    5    0    0    0    0    0
## [6,]    0    0    0    0    0    6    0    0    0    0
## [7,]    0    0    0    0    0    0    7    0    0    0
## [8,]    0    0    0    0    0    0    0    8    0    0
## [9,]    0    0    0    0    0    0    0    0    9    0
## [10,]   0    0    0    0    0    0    0    0    0   10
```

Question 2

Consider a Fibonacci sequence $S_n = S_{n-1} + S_{n-2}$ with the initial value $S_0 = 0$ and the value at stage 1 as $S_1 = 1$. Please determine the values of S_3 and S_{50} .

```
fib <- c(0, 1)
i <- 2

while ( i <= 51) {
  fib <- c(fib, fib[i-1] + fib[i])
  i <- i + 1
}

print(fib[4])
```

```
## [1] 2
```

```
print(fib[51])
```

```
## [1] 12586269025
```

Question 3

Find all the integers between 1 and 100 which are divisible by both 3 and 5. Store the results into a vector. Print each element of the resulting vector.

```
v = seq(1,100)
v[ v%%15 ==0]
```

```
## [1] 15 30 45 60 75 90
```

```
v
```

```
##      [1]      1      2      3      4      5      6      7      8      9     10     11     12     13     14     15     16     17     18
##    [19]     19     20     21     22     23     24     25     26     27     28     29     30     31     32     33     34     35     36
##   [37]     37     38     39     40     41     42     43     44     45     46     47     48     49     50     51     52     53     54
##  [55]     55     56     57     58     59     60     61     62     63     64     65     66     67     68     69     70     71     72
##  [73]     73     74     75     76     77     78     79     80     81     82     83     84     85     86     87     88     89     90
##  [91]     91     92     93     94     95     96     97     98     99    100
```

Question 4

Create a function with input parameter n and returns a vector. The output vector contains all integers between 1 and n which are divisible by 3 and 5. Please test the function with two cases n = 100 and n = 200.

```
q4 = function(arg1){
  v = seq(1, arg1)
  v = v[ v%%15 ==0]
  return(v)
}
```

```
q4(100)
```

```
## [1] 15 30 45 60 75 90
```

```
q4(200)
```

```
##      [1]      15      30      45      60      75      90     105     120     135     150     165     180     195
```

Question 5

Create a function with parameters a and b. In the function body, it tries to find the smallest positive number that is divisible by both a and b. Please test your function with following two cases (a = 3, b = 5) and (a = 6, b = 10).

```
q5 = function(a, b){
  i = max(a, b)

  repeat{
    if(i%%a == 0 && i%%b == 0) {
      break
    }
    i = i+1
  }

  return(i)
}
```

```
q5(3,5)
```

```
## [1] 15
```

```
q5(6,10)
```

```
## [1] 30
```

Question 6

Please find the attached JPM.csv and load this data into R. Make a subset of the loaded data frame. The subset contains open prices, closing prices and adjusted closing prices (They are indicated by Open, Close and Adjusted). Please calculate the mean value of each column of the subset. (Hint. apply functions are better choice for this problem.)

```
data <- read.csv("./JPM.csv", encoding="UTF-8")
subset = data[c("JPM.Open", "JPM.Close", "JPM.Adjusted")]
print(subset)
```

##	JPM.Open	JPM.Close	JPM.Adjusted
## 1	48.00	48.07	32.52235
## 2	48.05	48.19	32.60353
## 3	48.17	47.79	32.33291
## 4	47.57	47.95	32.44115
## 5	47.90	47.75	32.30586
## 6	47.47	48.10	32.54265
## 7	48.00	48.31	32.68473
## 8	48.10	47.99	32.46823
## 9	48.16	48.39	32.73885
## 10	48.65	48.43	32.76591
## 11	48.05	48.15	32.57648
## 12	48.30	48.76	32.98918
## 13	48.87	49.66	33.59809
## 14	49.57	49.83	33.71310
## 15	49.68	50.36	34.07168
## 16	50.24	50.21	33.97020
## 17	50.00	49.70	33.62515
## 18	49.57	49.47	33.46952
## 19	49.70	50.18	33.94991
## 20	50.07	50.93	34.45732
## 21	50.96	51.21	34.64675
## 22	51.22	50.93	34.45732
## 23	50.81	50.96	34.47761
## 24	50.85	51.00	34.50469
## 25	50.84	51.21	34.64675
## 26	51.06	50.93	34.45732
## 27	51.02	50.42	34.11226
## 28	50.59	50.44	34.12581
## 29	50.35	50.95	34.47085
## 30	51.09	51.42	34.78884
## 31	51.05	51.21	34.64675
## 32	51.16	51.25	34.67382
## 33	51.15	51.63	34.93092
## 34	51.45	51.65	34.94445
## 35	51.80	51.64	34.93768
## 36	51.55	51.03	34.52497
## 37	51.17	50.81	34.37613
## 38	50.61	49.22	33.30040

## 39	49.07	49.39	33.41540
## 40	48.98	49.20	33.28687
## 41	48.95	48.19	32.60353
## 42	47.60	47.54	32.16377
## 43	47.97	48.52	32.82680
## 44	48.69	48.36	32.71856
## 45	48.79	48.74	32.97566
## 46	49.12	48.82	33.02977
## 47	48.64	48.84	33.04331
## 48	48.45	46.70	31.59547
## 49	46.72	47.30	32.00139
## 50	47.14	47.70	32.27203
## 51	47.62	47.03	31.81873
## 52	47.20	47.58	32.19083
## 53	47.51	47.75	32.30586
## 54	47.81	49.05	33.18538
## 55	49.06	48.47	32.79298
## 56	48.59	48.52	32.82680
## 57	48.55	48.70	32.94859
## 58	48.59	48.57	32.86063
## 59	48.29	47.99	32.46823
## 60	48.24	48.50	32.81327
## 61	48.61	48.38	32.73210
## 62	48.38	48.24	32.63736
## 63	48.25	48.56	33.08705
## 64	48.56	48.56	33.08705
## 65	48.35	48.77	33.23015
## 66	48.78	49.00	33.38688
## 67	49.01	49.24	33.55039
## 68	49.10	49.15	33.48907
## 69	49.52	49.20	33.52314
## 70	49.45	49.09	33.44818
## 71	49.47	49.97	34.04779
## 72	49.97	50.18	34.19088
## 73	51.57	52.07	35.47865
## 74	52.03	52.09	35.49228
## 75	52.65	52.54	35.79890
## 76	52.35	52.28	35.62174
## 77	52.06	52.16	35.53998
## 78	52.24	52.82	35.98968
## 79	52.77	52.94	36.07144
## 80	52.77	52.55	35.80572
## 81	52.46	52.10	35.49910
## 82	52.40	52.26	35.60812
## 83	52.00	52.55	35.80572
## 84	52.83	52.70	35.90791
## 85	52.80	52.63	35.86023
## 86	52.81	52.73	35.92836
## 87	52.48	52.45	35.73757
## 88	52.55	53.20	36.24860
## 89	52.79	52.00	35.43097
## 90	52.12	52.15	35.53316
## 91	52.00	51.83	35.31513
## 92	52.09	52.03	35.45141

## 93	52.37	52.98	36.09870
## 94	52.78	52.56	35.81252
## 95	52.62	52.54	35.79890
## 96	52.38	52.56	35.81252
## 97	52.56	52.29	35.62856
## 98	52.33	51.99	35.42415
## 99	52.00	51.59	35.15161
## 100	51.53	51.64	35.18566
## 101	51.65	51.82	35.30832
## 102	51.43	52.06	35.47185
## 103	52.25	51.83	35.31513
## 104	51.92	51.90	35.36282
## 105	51.56	51.57	35.13798
## 106	51.24	51.22	34.89949
## 107	51.23	50.56	34.44979
## 108	50.30	49.82	33.94558
## 109	49.83	50.41	34.34759
## 110	50.41	50.43	34.36122
## 111	50.22	49.35	33.62534
## 112	49.63	50.29	34.26582
## 113	49.93	50.32	34.28627
## 114	50.64	50.56	34.44979
## 115	50.83	50.43	34.36122
## 116	50.44	50.85	34.64739
## 117	50.91	49.46	33.70030
## 118	49.69	49.84	33.95922
## 119	49.56	48.72	33.19608
## 120	48.72	48.36	32.95078
## 121	48.45	48.60	33.11432
## 122	48.26	49.24	33.55039
## 123	49.25	48.96	33.35960
## 124	49.23	48.45	33.01212
## 125	48.90	49.15	33.48907
## 126	49.19	49.34	33.88047
## 127	49.10	48.79	33.50280
## 128	48.62	48.97	33.62640
## 129	49.21	48.79	33.50280
## 130	48.30	47.51	32.62387
## 131	47.52	48.13	33.04961
## 132	48.69	49.53	34.01094
## 133	49.68	50.05	34.36802
## 134	49.91	49.83	34.21695
## 135	49.95	49.92	34.27876
## 136	48.81	48.88	33.56461
## 137	49.50	48.62	33.38607
## 138	48.81	47.56	32.65819
## 139	47.75	47.15	32.37665
## 140	46.63	45.34	31.13378
## 141	45.67	45.27	31.08571
## 142	44.30	44.08	30.26857
## 143	44.09	44.23	30.37157
## 144	44.75	44.75	30.72864
## 145	45.07	44.01	30.22050
## 146	43.70	44.38	30.47458

## 147	44.41	44.59	30.61878
## 148	44.60	43.65	29.97329
## 149	43.76	45.11	30.97584
## 150	44.99	45.34	31.13378
## 151	45.75	46.51	31.93718
## 152	45.04	44.17	30.33036
## 153	43.36	44.25	30.38530
## 154	45.23	43.83	30.09691
## 155	43.94	43.30	29.73295
## 156	43.13	43.00	29.52697
## 157	42.75	45.47	31.22304
## 158	48.08	47.01	32.28052
## 159	47.17	46.49	31.92346
## 160	46.12	46.20	31.72431
## 161	46.67	46.00	31.58698
## 162	46.45	45.67	31.36039
## 163	45.50	45.95	31.55264
## 164	45.75	44.91	30.83851
## 165	44.48	43.60	29.93898
## 166	43.88	44.13	30.30291
## 167	43.64	43.97	30.19304
## 168	45.00	44.52	30.57071
## 169	44.40	45.30	31.10631
## 170	44.83	44.17	30.33036
## 171	44.24	44.21	30.35784
## 172	43.27	43.52	29.88404
## 173	43.75	43.93	30.16557
## 174	43.96	44.54	30.58443
## 175	44.50	44.47	30.53638
## 176	44.42	45.60	31.31232
## 177	45.23	45.54	31.27111
## 178	45.39	45.29	31.09944
## 179	45.68	47.82	32.83673
## 180	47.97	47.57	32.66505
## 181	47.62	46.96	32.24620
## 182	47.50	47.13	32.36292
## 183	47.20	46.34	31.82046
## 184	46.25	46.10	31.65565
## 185	46.26	46.13	31.67626
## 186	46.20	46.21	31.73119
## 187	46.05	45.82	31.46338
## 188	45.47	46.81	32.14319
## 189	46.99	47.16	32.38352
## 190	46.71	47.00	32.53582
## 191	47.20	47.25	32.70888
## 192	47.45	47.58	32.93733
## 193	47.31	47.44	32.84041
## 194	47.59	47.57	32.93041
## 195	47.47	46.91	32.47352
## 196	47.01	46.66	32.30046
## 197	46.67	46.82	32.41121
## 198	46.77	46.27	32.03047
## 199	46.00	45.11	31.22747
## 200	47.04	46.37	32.09971

## 201	46.10	45.90	31.77435
## 202	45.79	45.02	31.16517
## 203	44.90	45.37	31.40745
## 204	45.92	45.94	31.80204
## 205	45.73	46.27	32.03047
## 206	46.10	46.05	31.87818
## 207	46.96	47.32	32.75734
## 208	47.39	46.67	32.30738
## 209	46.40	46.56	32.23123
## 210	46.95	47.00	32.53582
## 211	45.65	44.32	30.68059
## 212	44.45	43.15	29.87065
## 213	42.69	42.77	29.60760
## 214	42.69	44.11	30.53522
## 215	42.93	42.24	29.24070
## 216	42.51	42.61	29.49683
## 217	41.40	42.31	29.28917
## 218	42.11	42.39	29.34454
## 219	43.30	45.05	31.18594
## 220	45.90	45.15	31.25516
## 221	44.60	43.53	30.13370
## 222	43.74	43.09	29.82912
## 223	42.70	41.37	28.63844
## 224	41.37	41.63	28.81843
## 225	40.81	40.68	28.16079
## 226	41.50	41.95	29.03996
## 227	41.87	40.46	28.00849
## 228	40.92	42.35	29.31686
## 229	42.73	43.96	30.43140
## 230	43.38	43.65	30.21678
## 231	45.38	45.62	31.58051
## 232	45.90	45.21	31.29668
## 233	44.32	44.15	30.56290
## 234	44.54	44.90	31.08209
## 235	44.88	46.21	31.98895
## 236	46.21	46.08	31.89896
## 237	46.80	47.42	32.82657
## 238	47.11	45.94	31.80204
## 239	47.03	46.15	31.94740
## 240	45.83	45.76	31.67743
## 241	45.24	45.20	31.28976
## 242	44.82	44.53	30.82596
## 243	44.77	43.90	30.38984
## 244	43.90	43.98	30.44523
## 245	44.33	43.33	29.99527
## 246	43.92	44.11	30.53522
## 247	44.14	44.83	31.03364
## 248	44.72	44.94	31.10978
## 249	44.60	43.64	30.20985
## 250	44.19	43.26	29.94680
## 251	43.07	43.65	30.21678
## 252	43.55	42.17	29.44861
## 253	42.34	41.88	29.24610
## 254	41.41	40.93	28.58269

## 255	41.10	41.34	28.86900
## 256	41.46	39.70	27.72373
## 257	39.59	40.26	28.11481
## 258	39.77	41.33	28.86202
## 259	40.88	40.86	28.53382
## 260	41.27	41.36	28.88297
## 261	40.73	39.17	27.35363
## 262	40.46	41.43	28.93184
## 263	41.57	40.04	27.96117
## 264	40.24	39.59	27.64691
## 265	37.66	40.86	28.53382
## 266	40.40	45.72	31.92768
## 267	45.83	44.96	31.39695
## 268	45.67	43.64	30.47515
## 269	43.79	45.57	31.82294
## 270	45.94	47.45	33.13580
## 271	47.10	47.35	33.06598
## 272	46.41	47.40	33.10089
## 273	47.26	48.25	33.69446
## 274	47.83	46.22	32.27686
## 275	45.05	43.89	30.64975
## 276	44.27	43.72	30.53104
## 277	43.39	45.11	31.50171
## 278	44.96	43.82	30.60085
## 279	43.89	43.35	30.27264
## 280	43.66	43.31	30.24472
## 281	43.55	44.10	30.79640
## 282	44.05	42.61	29.75588
## 283	42.41	43.25	30.20281
## 284	43.54	42.83	29.90951
## 285	42.37	43.15	30.13298
## 286	43.14	43.07	30.07712
## 287	43.06	43.93	30.67768
## 288	43.43	44.03	30.74751
## 289	43.73	43.72	30.53104
## 290	43.07	44.41	31.01288
## 291	44.00	42.44	29.63716
## 292	41.88	40.65	28.38716
## 293	40.55	39.82	27.80753
## 294	39.37	39.19	27.36759
## 295	39.36	38.74	27.05335
## 296	38.18	37.37	26.09663
## 297	36.89	37.56	26.22931
## 298	37.73	36.48	25.47512
## 299	38.48	38.84	27.12318
## 300	38.85	38.61	26.96257
## 301	37.84	38.11	26.61338
## 302	38.80	36.54	25.51701
## 303	37.00	40.31	28.14972
## 304	42.19	42.71	29.82571
## 305	43.26	42.47	29.65812
## 306	42.91	45.97	32.10229
## 307	45.42	46.55	32.50731
## 308	46.02	46.06	32.16512

## 309	45.27	44.11	30.80338
## 310	44.22	42.86	29.93048
## 311	43.20	42.71	29.82571
## 312	42.71	42.95	29.99332
## 313	45.13	47.00	32.82155
## 314	47.08	46.24	32.55404
## 315	45.37	46.28	32.58219
## 316	45.85	45.57	32.08232
## 317	46.43	45.54	32.06120
## 318	45.24	44.86	31.58248
## 319	45.18	44.30	31.18823
## 320	44.20	43.86	30.87845
## 321	43.32	42.53	29.94209
## 322	42.40	41.50	29.21696
## 323	42.18	42.12	29.65344
## 324	43.53	44.96	31.65286
## 325	44.34	45.12	31.76552
## 326	46.33	45.76	32.21610
## 327	45.29	45.23	31.84296
## 328	44.96	45.65	32.13865
## 329	45.41	45.15	31.78663
## 330	45.37	46.97	33.06796
## 331	47.29	47.79	33.64527
## 332	47.67	47.34	33.32845
## 333	47.34	47.08	33.14541
## 334	47.25	47.65	33.54670
## 335	47.68	49.25	34.67313
## 336	49.90	48.66	34.25775
## 337	48.32	48.00	33.79311
## 338	47.34	48.20	33.93391
## 339	48.22	46.57	32.78635
## 340	46.98	46.05	32.42026
## 341	45.75	46.57	32.78635
## 342	46.82	47.24	33.25805
## 343	47.04	45.48	32.01898
## 344	46.00	45.91	32.32170
## 345	46.05	47.02	33.10318
## 346	47.32	46.53	32.75820
## 347	46.55	45.99	32.37801
## 348	45.66	43.70	30.76581
## 349	43.80	42.42	29.86466
## 350	42.40	43.05	30.30817
## 351	42.72	42.32	29.79425
## 352	42.40	43.01	30.28004
## 353	43.39	42.86	30.17444
## 354	42.69	43.57	30.67428
## 355	43.96	43.00	30.27300
## 356	42.63	42.15	29.67457
## 357	42.53	41.89	29.49153
## 358	41.74	41.63	29.30848
## 359	41.90	42.10	29.63936
## 360	41.79	40.09	28.22428
## 361	40.32	37.51	26.40791
## 362	37.23	38.29	26.95704

## 363	38.50	37.13	26.14037
## 364	37.71	38.01	26.75992
## 365	38.39	39.58	27.86523
## 366	39.48	39.94	28.11869
## 367	40.36	39.04	27.48506
## 368	38.53	38.74	27.27386
## 369	38.79	38.65	27.21050
## 370	37.69	37.86	26.65431
## 371	37.99	36.87	25.95734
## 372	36.81	37.72	26.55575
## 373	37.94	37.91	26.68952
## 374	37.16	36.32	25.57011
## 375	36.45	35.05	24.67600
## 376	34.86	34.31	24.15504
## 377	33.69	34.02	24.21911
## 378	34.36	34.60	24.63200
## 379	35.12	35.31	25.13746
## 380	35.50	34.04	24.23334
## 381	34.30	35.77	25.46495
## 382	35.74	34.28	24.40419
## 383	34.00	34.51	24.56793
## 384	33.38	33.16	23.60686
## 385	34.19	31.69	22.56036
## 386	30.73	31.02	22.08338
## 387	32.30	35.94	25.58597
## 388	38.05	40.80	29.04585
## 389	41.20	40.02	28.49055
## 390	40.34	38.65	27.51524
## 391	38.16	40.86	29.08855
## 392	40.91	41.96	29.87165
## 393	42.06	39.14	27.86407
## 394	39.17	39.52	28.13460
## 395	39.41	37.66	26.81045
## 396	37.94	40.75	29.01024
## 397	41.41	41.57	29.59401
## 398	40.63	40.63	28.92482
## 399	41.11	40.76	29.01736
## 400	40.14	40.14	28.57597
## 401	41.27	41.89	29.82181
## 402	41.35	41.39	29.46587
## 403	40.68	39.81	28.34105
## 404	39.51	41.07	29.23805
## 405	40.79	41.89	29.82181
## 406	40.99	37.92	26.99554
## 407	37.64	36.91	26.27651
## 408	36.59	37.81	26.91724
## 409	38.05	38.07	27.10234
## 410	37.92	36.74	26.15548
## 411	36.01	35.58	25.32968
## 412	35.52	37.00	26.34060
## 413	36.18	36.26	25.81377
## 414	37.22	37.67	26.81756
## 415	37.40	36.13	25.72123
## 416	36.17	36.61	26.06295

## 417	36.55	37.14	26.44025
## 418	37.66	38.88	27.67898
## 419	38.51	38.49	27.40134
## 420	39.56	38.99	27.75728
## 421	38.91	39.71	28.26986
## 422	39.30	37.91	26.98843
## 423	37.50	39.60	28.19154
## 424	42.39	41.55	29.57976
## 425	40.81	39.47	28.09900
## 426	39.99	39.40	28.04916
## 427	38.25	41.65	29.65097
## 428	40.84	41.17	29.30924
## 429	38.39	37.00	26.34060
## 430	35.58	40.74	29.00313
## 431	39.08	35.77	25.46495
## 432	36.53	40.30	28.68989
## 433	47.00	47.05	33.49527
## 434	45.69	40.80	29.04585
## 435	40.55	40.56	28.87498
## 436	41.50	40.50	28.83227
## 437	42.25	43.46	30.93950
## 438	40.55	48.24	34.34244
## 439	46.58	41.00	29.18822
## 440	44.63	46.70	33.24608
## 441	46.91	49.63	35.33197
## 442	49.25	49.85	35.76241
## 443	50.31	45.90	32.92870
## 444	43.49	44.00	31.56563
## 445	45.43	39.32	28.20819
## 446	38.93	39.30	28.19385
## 447	41.03	36.68	26.31425
## 448	35.03	41.64	29.87256
## 449	43.91	41.99	30.12365
## 450	43.33	40.71	29.20537
## 451	39.33	38.49	27.61276
## 452	39.02	40.49	29.04756
## 453	39.63	39.33	28.21537
## 454	40.01	40.66	29.16951
## 455	39.92	39.74	28.50950
## 456	39.15	37.17	26.66578
## 457	37.36	37.85	27.15362
## 458	35.12	35.43	25.41751
## 459	35.10	34.00	24.39162
## 460	34.95	37.60	26.97426
## 461	37.11	35.71	25.61838
## 462	36.89	37.62	26.98861
## 463	37.29	41.25	29.59277
## 464	41.25	40.73	29.21972
## 465	41.25	42.17	30.25278
## 466	41.73	39.22	28.13646
## 467	38.96	38.26	27.44773
## 468	38.23	37.75	27.08187
## 469	38.28	36.41	26.12056
## 470	35.82	36.35	26.07751

## 471	35.42	34.57	24.80054
## 472	34.65	37.19	26.68014
## 473	36.33	34.47	24.72881
## 474	33.82	32.77	23.50922
## 475	32.76	32.14	23.05726
## 476	31.69	28.47	20.42440
## 477	27.74	23.38	16.77283
## 478	23.74	22.72	16.29934
## 479	23.92	27.58	19.78591
## 480	29.63	29.77	21.35702
## 481	28.76	30.62	21.96681
## 482	30.36	31.66	22.71290
## 483	30.67	26.12	18.73851
## 484	26.54	28.53	20.46744
## 485	27.44	30.25	21.70137
## 486	29.84	31.08	22.29681
## 487	30.41	33.35	23.92531
## 488	33.97	36.49	26.17795
## 489	35.67	33.96	24.36293
## 490	34.40	33.52	24.04727
## 491	32.60	29.94	21.47898
## 492	28.44	30.94	22.19637
## 493	29.34	28.63	20.53918
## 494	29.01	32.35	23.20791
## 495	31.50	31.86	22.85638
## 496	32.16	30.21	21.67267
## 497	30.11	30.32	21.75159
## 498	30.64	29.82	21.39289
## 499	30.23	29.11	20.88354
## 500	28.65	29.85	21.41440
## 501	30.05	29.80	21.37854
## 502	29.99	29.78	21.36419
## 503	29.89	31.01	22.24659
## 504	30.70	31.53	22.61964
## 505	31.19	31.35	22.76487
## 506	30.73	29.25	21.23995
## 507	29.79	29.88	21.69743
## 508	29.15	28.09	20.39761
## 509	27.90	27.22	19.76586
## 510	27.55	25.97	18.85817
## 511	25.92	24.91	18.08845
## 512	25.21	26.35	19.13412
## 513	25.59	25.91	18.81460
## 514	26.54	24.34	17.67455
## 515	24.83	22.82	16.57080
## 516	21.00	18.09	13.13609
## 517	19.29	22.63	16.43282
## 518	22.36	23.10	16.77412
## 519	21.92	24.28	17.63098
## 520	25.00	24.50	17.79072
## 521	25.12	25.06	18.19737
## 522	27.19	27.66	20.08538
## 523	26.74	25.43	18.46606
## 524	25.81	25.51	18.52415

## 525	25.00	25.20	18.29903
## 526	25.03	24.05	17.46396
## 527	24.25	24.04	17.45670
## 528	23.74	24.54	17.81977
## 529	25.51	27.63	20.06358
## 530	26.65	27.28	19.80944
## 531	26.86	24.62	17.87787
## 532	25.25	26.09	18.94532
## 533	25.35	26.19	19.01793
## 534	25.25	24.69	17.92870
## 535	22.80	21.65	15.72119
## 536	22.18	21.51	15.61954
## 537	22.07	20.60	14.95874
## 538	19.71	19.90	14.45043
## 539	20.90	19.51	14.16723
## 540	20.13	21.02	15.26372
## 541	20.83	21.73	15.77929
## 542	23.32	23.05	16.73781
## 543	21.63	22.85	16.59258
## 544	21.70	21.16	15.36538
## 545	21.68	21.01	15.25645
## 546	21.74	19.30	14.01473
## 547	18.50	16.60	12.05413
## 548	17.19	15.93	11.56760
## 549	15.37	15.90	11.54582
## 550	17.35	19.50	14.15997
## 551	20.35	20.40	14.81350
## 552	20.15	23.20	16.84673
## 553	23.59	23.75	17.24612
## 554	24.31	23.09	16.76685
## 555	23.30	25.14	18.25547
## 556	24.82	27.11	19.68599
## 557	27.25	24.95	18.11750
## 558	24.66	23.15	16.81043
## 559	25.30	28.86	20.95675
## 560	28.05	26.40	19.17042
## 561	27.19	28.56	20.73891
## 562	29.05	29.10	21.13103
## 563	28.27	27.40	19.89657
## 564	25.67	24.85	18.04489
## 565	25.73	26.58	19.30113
## 566	25.29	28.14	20.43393
## 567	29.58	28.16	20.48485
## 568	27.98	29.28	21.29958
## 569	28.27	28.20	20.51395
## 570	27.28	27.25	19.82287
## 571	27.45	27.43	19.95381
## 572	30.44	32.75	23.82382
## 573	32.01	33.70	24.51489
## 574	33.04	30.70	22.33256
## 575	30.62	32.56	23.68560
## 576	34.01	33.24	24.18026
## 577	33.35	33.26	24.19481
## 578	31.78	29.69	21.59784

## 579	29.07	32.53	23.66378
## 580	31.64	31.90	23.20548
## 581	32.23	33.21	24.15843
## 582	33.66	33.38	24.28211
## 583	32.53	32.78	23.84563
## 584	32.35	32.79	23.85292
## 585	33.44	34.48	25.08230
## 586	35.01	33.00	24.00568
## 587	32.85	32.49	23.63468
## 588	33.06	35.79	26.03525
## 589	35.45	34.82	25.32963
## 590	35.82	37.22	27.07549
## 591	38.50	35.24	25.63516
## 592	36.80	38.94	28.32670
## 593	37.35	35.83	26.06434
## 594	36.24	35.36	25.72244
## 595	34.70	34.05	24.76949
## 596	34.12	35.54	25.85339
## 597	35.45	34.91	25.39510
## 598	35.71	37.26	27.10459
## 599	37.30	35.81	26.04979
## 600	36.61	34.55	25.13322
## 601	34.19	34.90	25.38782
## 602	35.26	34.41	25.03137
## 603	34.12	36.54	26.58083
## 604	36.50	34.66	25.21324
## 605	35.14	36.65	26.66085
## 606	36.35	36.90	26.84272
## 607	37.40	36.11	26.26803
## 608	35.07	34.50	25.09685
## 609	34.40	33.98	24.71858
## 610	34.40	35.35	25.71518
## 611	35.72	34.55	25.13322
## 612	34.55	35.39	25.74427
## 613	35.72	35.26	25.64970
## 614	35.57	34.84	25.34417
## 615	35.07	34.94	25.41692
## 616	34.86	35.13	25.55513
## 617	34.88	34.00	24.73312
## 618	34.27	33.50	24.36940
## 619	33.43	32.73	23.80927
## 620	32.85	34.17	24.85679
## 621	34.65	35.00	25.46057
## 622	34.69	32.87	23.91111
## 623	33.11	33.57	24.42033
## 624	33.78	33.46	24.34030
## 625	33.48	34.14	24.83496
## 626	33.88	34.45	25.06047
## 627	34.55	34.60	25.16959
## 628	34.60	34.11	24.81314
## 629	34.27	33.77	24.60187
## 630	33.36	32.27	23.50910
## 631	32.03	32.60	23.74952
## 632	32.63	32.81	23.90251

## 633	32.93	32.71	23.82964
## 634	32.89	33.62	24.49259
## 635	33.31	32.34	23.56010
## 636	32.87	34.71	25.28667
## 637	34.53	34.70	25.27939
## 638	35.11	36.26	26.41586
## 639	35.50	36.13	26.32117
## 640	36.42	36.89	26.87483
## 641	37.02	36.98	26.94040
## 642	37.20	36.94	26.91125
## 643	36.40	36.83	26.83113
## 644	36.95	38.15	27.79277
## 645	38.05	37.92	27.62520
## 646	37.97	38.13	27.77819
## 647	37.74	38.08	27.74177
## 648	37.79	37.77	27.51593
## 649	38.13	38.47	28.02588
## 650	38.38	38.65	28.15702
## 651	39.12	39.60	28.84910
## 652	39.27	40.21	29.29349
## 653	40.34	41.78	30.43726
## 654	42.28	40.75	29.68689
## 655	41.28	42.36	30.85980
## 656	42.03	42.69	31.10021
## 657	42.28	41.24	30.04387
## 658	41.19	42.21	30.75052
## 659	42.73	42.90	31.25320
## 660	42.63	42.45	30.92537
## 661	41.21	40.73	29.67232
## 662	41.10	41.70	30.37898
## 663	41.15	41.41	30.16772
## 664	41.53	42.42	30.90352
## 665	42.86	43.66	31.80687
## 666	43.86	43.01	31.33333
## 667	43.39	43.58	31.74860
## 668	43.39	43.30	31.54459
## 669	43.05	43.45	31.65387
## 670	43.81	42.92	31.26777
## 671	42.44	43.46	31.66116
## 672	43.08	41.67	30.35713
## 673	41.51	40.86	29.76703
## 674	41.23	42.11	30.67766
## 675	42.33	42.34	30.84522
## 676	42.79	42.54	30.99093
## 677	42.60	42.86	31.22405
## 678	42.73	43.02	31.34061
## 679	43.13	42.50	30.96179
## 680	42.08	43.75	31.87244
## 681	43.61	43.19	31.46446
## 682	43.35	44.65	32.52810
## 683	44.29	44.96	32.75393
## 684	45.24	44.95	32.74664
## 685	44.54	44.55	32.45524
## 686	44.81	46.47	33.85398

## 687	46.40	45.06	32.82679
## 688	45.21	44.37	32.32412
## 689	44.15	43.65	31.79957
## 690	43.97	44.81	32.64466
## 691	44.89	44.88	32.69566
## 692	44.80	43.82	31.92342
## 693	43.40	41.37	30.13857
## 694	40.82	41.86	30.53244
## 695	42.48	43.80	31.94746
## 696	44.36	44.91	32.75708
## 697	44.60	45.70	33.33332
## 698	46.04	45.30	33.04155
## 699	45.46	45.85	33.44271
## 700	46.37	46.08	33.61048
## 701	45.65	45.66	33.30414
## 702	47.19	47.16	34.39823
## 703	46.36	47.16	34.39823
## 704	46.70	46.06	33.59590
## 705	46.42	45.98	33.53754
## 706	45.81	46.03	33.57402
## 707	46.02	44.65	32.56746
## 708	44.92	45.71	33.34059
## 709	45.70	45.23	32.99050
## 710	45.12	43.82	31.96205
## 711	43.99	43.90	32.02040
## 712	43.73	42.68	31.13055
## 713	43.22	44.35	32.34864
## 714	43.95	41.77	30.46679
## 715	42.18	42.58	31.05761
## 716	42.09	42.70	31.14514
## 717	43.21	42.21	30.78774
## 718	42.60	43.87	31.99853
## 719	43.14	43.48	31.71406
## 720	43.93	44.35	32.34864
## 721	44.14	44.17	32.21735
## 722	44.34	44.32	32.32675
## 723	44.08	43.30	31.58276
## 724	43.16	42.90	31.29101
## 725	43.25	43.04	31.39313
## 726	42.92	43.16	31.48065
## 727	43.14	43.38	31.64113
## 728	43.10	42.55	31.03572
## 729	42.47	42.46	30.97008
## 730	42.95	43.28	31.56818
## 731	43.26	42.48	30.98466
## 732	42.67	42.16	30.75126
## 733	40.98	41.33	30.14586
## 734	41.56	42.49	30.99197
## 735	42.61	42.22	30.79502
## 736	42.15	41.93	30.58351
## 737	42.30	41.40	30.19692
## 738	42.25	41.74	30.44492
## 739	41.63	41.25	30.08751
## 740	41.01	41.21	30.05833

## 741	41.25	41.19	30.04375
## 742	41.36	41.27	30.10210
## 743	40.99	40.96	29.87599
## 744	41.01	41.77	30.46679
## 745	41.50	40.86	29.80305
## 746	41.17	41.36	30.16775
## 747	41.06	40.27	29.37271
## 748	40.53	40.95	29.86870
## 749	41.55	41.90	30.56162
## 750	42.00	41.94	30.59079
## 751	41.84	41.56	30.31362
## 752	41.68	41.89	30.55433
## 753	41.85	41.72	30.43033
## 754	41.73	41.49	30.26256
## 755	41.27	41.53	30.29175
## 756	41.62	41.67	30.39384
## 757	41.79	42.85	31.29211
## 758	42.79	43.68	31.89822
## 759	43.45	43.92	32.07349
## 760	43.79	44.79	32.70883
## 761	44.37	44.68	32.62849
## 762	45.12	44.53	32.51894
## 763	43.99	43.49	31.75946
## 764	43.55	44.25	32.31447
## 765	44.20	44.69	32.63578
## 766	44.30	43.68	31.89822
## 767	43.40	43.28	31.60611
## 768	43.01	43.40	31.69375
## 769	43.04	40.54	29.60516
## 770	40.65	39.16	28.59740
## 771	39.76	39.21	28.63390
## 772	39.00	38.44	28.07158
## 773	38.35	39.33	28.72154
## 774	39.68	39.48	28.83108
## 775	39.65	38.94	28.43673
## 776	39.10	39.63	28.94063
## 777	39.80	40.55	29.61247
## 778	40.58	40.29	29.42259
## 779	39.79	38.35	28.00587
## 780	38.64	38.30	27.96936
## 781	38.29	37.70	27.53120
## 782	38.19	38.39	28.03507
## 783	38.64	38.87	28.38561
## 784	38.84	39.02	28.49515
## 785	38.67	38.95	28.44404
## 786	39.33	40.07	29.26193
## 787	40.26	40.04	29.24003
## 788	39.94	40.41	29.51022
## 789	40.11	40.03	29.23274
## 790	40.40	40.85	29.83154
## 791	40.90	39.88	29.12319
## 792	40.05	40.85	29.83154
## 793	40.16	40.64	29.67818
## 794	40.69	41.97	30.64946

## 795	42.03	41.83	30.54721
## 796	41.98	41.62	30.39384
## 797	41.65	41.53	30.32814
## 798	41.91	41.92	30.61294
## 799	42.32	42.81	31.26288
## 800	42.85	42.59	31.10222
## 801	42.39	42.42	30.97808
## 802	42.87	42.93	31.35051
## 803	42.91	43.18	31.53308
## 804	43.34	43.15	31.51116
## 805	42.92	43.07	31.45275
## 806	43.35	43.24	31.57690
## 807	43.31	43.79	31.97854
## 808	43.75	43.64	31.86900
## 809	43.45	43.45	31.73026
## 810	43.07	43.74	31.94203
## 811	43.85	44.58	32.55547
## 812	44.44	44.94	32.81835
## 813	44.98	44.94	32.81835
## 814	45.04	45.02	32.87678
## 815	45.25	44.86	32.75995
## 816	44.90	44.58	32.55547
## 817	44.31	44.75	32.67960
## 818	45.03	45.18	33.03052
## 819	45.28	45.34	33.14750
## 820	45.23	45.84	33.51304
## 821	45.83	45.32	33.13287
## 822	45.16	45.76	33.45455
## 823	45.88	45.98	33.61540
## 824	46.03	46.14	33.73237
## 825	46.04	45.87	33.53497
## 826	47.40	47.73	34.89479
## 827	47.65	47.81	34.95328
## 828	47.67	45.55	33.30102
## 829	45.23	45.39	33.18405
## 830	45.77	45.88	33.54229
## 831	46.04	45.35	33.15480
## 832	44.91	44.74	32.70885
## 833	44.73	44.94	32.85506
## 834	44.78	43.89	32.08741
## 835	43.48	42.41	31.00542
## 836	42.84	43.46	31.77305
## 837	43.89	44.00	32.16784
## 838	44.02	42.58	31.12970
## 839	42.97	43.53	31.82422
## 840	42.97	42.47	31.04929
## 841	42.11	42.63	31.16625
## 842	42.63	40.81	29.83567
## 843	41.03	40.76	29.79913
## 844	42.32	41.95	30.66912
## 845	41.46	41.55	30.37667
## 846	41.74	41.69	30.47903
## 847	41.44	40.81	29.83567
## 848	40.10	39.89	29.16308

## 849	39.93	39.84	29.12653
## 850	40.62	39.02	28.52703
## 851	38.54	39.38	28.79021
## 852	38.55	37.83	27.65704
## 853	37.02	40.05	29.28006
## 854	40.16	38.62	28.23459
## 855	37.67	38.94	28.46853
## 856	39.19	38.78	28.35157
## 857	39.58	40.42	29.55054
## 858	40.33	39.58	28.93644
## 859	39.32	38.54	28.17611
## 860	39.17	39.55	28.91450
## 861	39.86	39.10	28.58551
## 862	38.49	37.62	27.50350
## 863	37.79	36.72	26.84553
## 864	36.86	37.78	27.62048
## 865	38.15	37.12	27.13796
## 866	37.68	38.29	27.99334
## 867	37.79	38.09	27.84712
## 868	37.97	37.33	27.29149
## 869	37.55	38.25	27.96409
## 870	38.02	38.52	28.16149
## 871	38.60	38.44	28.10299
## 872	38.60	39.18	28.64399
## 873	39.55	38.87	28.41736
## 874	38.93	38.33	28.02257
## 875	38.29	38.89	28.43198
## 876	38.55	38.03	27.80325
## 877	38.78	39.44	28.83409
## 878	39.55	38.54	28.17611
## 879	37.91	37.06	27.09411
## 880	37.02	36.61	26.76511
## 881	36.54	36.08	26.41370
## 882	36.31	35.83	26.23068
## 883	36.69	36.33	26.59673
## 884	36.64	38.15	27.92912
## 885	38.78	38.16	27.93645
## 886	37.75	38.85	28.44158
## 887	38.86	39.19	28.69049
## 888	39.81	40.48	29.63489
## 889	40.15	40.35	29.53972
## 890	40.72	40.46	29.62024
## 891	40.28	39.00	28.55139
## 892	39.03	39.04	28.58068
## 893	38.32	39.63	29.01262
## 894	40.25	38.42	28.12678
## 895	38.96	39.35	28.80762
## 896	39.17	39.83	29.15904
## 897	39.80	40.33	29.52506
## 898	40.74	40.69	29.78862
## 899	40.44	40.32	29.51776
## 900	40.71	40.21	29.43722
## 901	39.72	40.28	29.48846
## 902	40.98	41.64	30.48410

## 903	41.50	41.08	30.07413
## 904	41.22	41.29	30.22789
## 905	40.97	41.27	30.21324
## 906	40.74	40.44	29.60560
## 907	40.55	39.82	29.15170
## 908	39.67	39.17	28.67585
## 909	38.65	37.77	27.65093
## 910	37.36	37.81	27.68022
## 911	37.80	37.50	27.45327
## 912	37.32	37.69	27.59236
## 913	37.97	37.48	27.43863
## 914	37.39	37.89	27.73878
## 915	37.66	37.07	27.13847
## 916	37.11	37.14	27.18972
## 917	37.21	36.88	26.99937
## 918	36.59	36.21	26.50887
## 919	35.95	36.23	26.52351
## 920	36.36	35.63	26.08426
## 921	35.87	36.60	26.79439
## 922	36.40	35.85	26.24532
## 923	35.94	36.36	26.61869
## 924	36.74	37.74	27.62897
## 925	37.84	38.16	27.93645
## 926	38.47	39.17	28.67585
## 927	38.73	38.28	28.02430
## 928	38.34	39.12	28.63926
## 929	39.93	40.10	29.35671
## 930	39.92	39.76	29.10778
## 931	40.64	41.12	30.10342
## 932	40.97	40.72	29.81058
## 933	40.51	40.98	30.00093
## 934	40.72	40.99	30.00825
## 935	41.03	40.06	29.32741
## 936	40.24	41.19	30.15467
## 937	41.31	40.59	29.71542
## 938	40.43	39.94	29.23956
## 939	39.63	39.10	28.62460
## 940	39.51	39.75	29.10047
## 941	39.54	39.08	28.60997
## 942	39.36	38.95	28.51480
## 943	38.79	38.41	28.11947
## 944	38.49	38.06	27.86323
## 945	38.34	38.81	28.41230
## 946	38.98	38.95	28.55158
## 947	39.36	39.64	29.05737
## 948	39.56	39.90	29.24795
## 949	40.11	39.52	28.96941
## 950	39.67	39.31	28.81546
## 951	39.52	39.73	29.12335
## 952	39.47	40.40	29.61447
## 953	40.66	39.84	29.20398
## 954	39.25	38.72	28.38298
## 955	38.87	37.15	27.23212
## 956	37.15	38.20	28.00181

## 957	37.90	37.69	27.62796
## 958	38.00	38.10	27.92849
## 959	38.19	37.70	27.63528
## 960	37.50	37.70	27.63528
## 961	37.97	37.07	27.17347
## 962	36.98	37.20	27.26877
## 963	37.06	37.54	27.51800
## 964	37.70	37.51	27.49601
## 965	37.45	37.63	27.58397
## 966	37.61	37.42	27.43004
## 967	37.53	36.96	27.09284
## 968	36.98	37.72	27.64995
## 969	38.14	39.80	29.17464
## 970	39.89	40.94	30.01029
## 971	40.86	40.51	29.69511
## 972	40.43	39.90	29.24795
## 973	39.87	40.62	29.77573
## 974	40.27	40.02	29.33591
## 975	39.86	39.61	29.03538
## 976	39.82	40.08	29.37991
## 977	39.74	39.61	29.03538
## 978	39.58	39.18	28.72017
## 979	39.57	39.66	29.07203
## 980	39.41	39.41	28.88878
## 981	39.06	38.51	28.22905
## 982	38.01	37.63	27.58397
## 983	37.83	38.16	27.97248
## 984	37.71	37.50	27.48868
## 985	37.47	37.91	27.78923
## 986	37.49	37.40	27.41537
## 987	37.95	38.15	27.96517
## 988	38.43	39.31	28.81546
## 989	39.07	39.61	29.03538
## 990	39.48	39.90	29.24795
## 991	40.35	39.25	28.77148
## 992	39.36	40.26	29.51185
## 993	40.67	40.81	29.91502
## 994	40.89	41.43	30.36950
## 995	41.57	41.51	30.42813
## 996	41.44	40.79	29.90036
## 997	40.73	40.21	29.47519
## 998	40.42	40.01	29.32859
## 999	40.06	39.67	29.07936
## 1000	39.83	39.95	29.28461
## 1001	40.16	41.00	30.05431
## 1002	41.17	42.16	30.90461
## 1003	42.15	42.08	30.84596
## 1004	41.82	42.67	31.27846
## 1005	42.70	42.61	31.23448
## 1006	42.58	42.36	31.05122
## 1007	42.31	42.23	30.95593
## 1008	42.11	42.42	31.09520
## 1009	43.00	43.58	31.94552
## 1010	43.78	44.16	32.40786

## 1011	43.92	44.70	32.80415
## 1012	44.40	44.48	32.64269
## 1013	44.54	43.64	32.02624
## 1014	43.27	43.40	31.85011
## 1015	43.70	43.60	31.99687
## 1016	44.44	44.71	32.81148
## 1017	44.94	44.45	32.62068
## 1018	44.51	44.91	32.95826
## 1019	45.02	44.75	32.84084
## 1020	44.55	43.71	32.07761
## 1021	43.83	44.75	32.84084
## 1022	45.05	45.29	33.23714
## 1023	45.21	45.02	33.03899
## 1024	44.82	44.87	32.92891
## 1025	45.20	44.98	33.00962
## 1026	44.98	45.10	33.09769
## 1027	45.05	44.54	32.68673
## 1028	44.41	44.94	32.98027
## 1029	45.20	45.93	33.70681
## 1030	45.79	45.45	33.35457
## 1031	45.48	45.46	33.36189
## 1032	45.00	44.59	32.72342
## 1033	44.75	45.50	33.39124
## 1034	45.49	45.74	33.56738
## 1035	45.36	45.11	33.10504
## 1036	45.10	45.53	33.41326
## 1037	45.40	46.57	34.17649
## 1038	46.60	46.54	34.15448
## 1039	46.56	46.82	34.35996
## 1040	47.15	47.94	35.18191
## 1041	47.77	47.82	35.09382
## 1042	47.82	48.00	35.22592
## 1043	47.20	46.01	33.76552
## 1044	46.04	45.96	33.72883
## 1045	45.63	45.91	33.69213
## 1046	46.25	46.68	34.25722
## 1047	46.81	46.69	34.26456
## 1048	46.47	45.60	33.46463
## 1049	45.39	45.21	33.17842
## 1050	45.72	46.08	33.81688
## 1051	45.98	45.52	33.40592
## 1052	45.62	45.19	33.16374
## 1053	45.38	46.40	34.05173
## 1054	46.33	46.56	34.16916
## 1055	46.08	45.53	33.41326
## 1056	45.28	45.74	33.56738
## 1057	45.42	45.30	33.24446
## 1058	44.55	44.61	32.73810
## 1059	44.64	43.81	32.15100
## 1060	44.46	44.56	32.70141
## 1061	45.24	45.74	33.56738
## 1062	46.28	45.63	33.48665
## 1063	45.66	45.47	33.36922
## 1064	45.29	45.60	33.46463

## 1065	45.70	45.73	33.56003
## 1066	45.70	45.86	33.65544
## 1067	46.10	45.96	33.72883
## 1068	45.83	46.02	33.77287
## 1069	46.53	46.45	34.08841
## 1070	46.05	46.10	33.83157
## 1071	46.55	46.35	34.01503
## 1072	46.12	46.34	34.19212
## 1073	46.17	46.58	34.36921
## 1074	46.81	47.64	35.15134
## 1075	47.64	47.40	34.97424
## 1076	47.52	46.84	34.56104
## 1077	47.00	46.86	34.57581
## 1078	46.55	46.64	34.41348
## 1079	47.24	46.25	34.12572
## 1080	45.68	44.97	33.18126
## 1081	45.24	44.89	33.12224
## 1082	44.27	43.96	32.43603
## 1083	44.26	44.65	32.94516
## 1084	44.90	44.56	32.87874
## 1085	44.68	44.68	32.96729
## 1086	44.65	44.61	32.91564
## 1087	44.85	45.12	33.29194
## 1088	45.30	45.50	33.57232
## 1089	45.61	45.85	33.83057
## 1090	45.81	45.63	33.66824
## 1091	45.94	45.18	33.33621
## 1092	44.95	45.92	33.88222
## 1093	45.98	45.50	33.57232
## 1094	45.24	45.17	33.32882
## 1095	45.47	45.04	33.23291
## 1096	44.75	44.96	33.17388
## 1097	45.06	45.16	33.32145
## 1098	45.02	44.23	32.63524
## 1099	44.10	44.09	32.53195
## 1100	44.06	43.15	31.83837
## 1101	42.97	42.88	31.63915
## 1102	42.68	43.81	32.32536
## 1103	43.72	44.08	32.52457
## 1104	44.32	44.00	32.46554
## 1105	43.83	43.13	31.82361
## 1106	42.40	42.55	31.39566
## 1107	42.77	42.34	31.24071
## 1108	42.11	42.27	31.18906
## 1109	42.12	42.45	31.32186
## 1110	42.70	42.79	31.57275
## 1111	43.24	43.24	31.90478
## 1112	42.87	41.76	30.81276
## 1113	41.93	41.61	30.70208
## 1114	41.09	41.57	30.67256
## 1115	41.10	40.53	29.90520
## 1116	40.92	40.72	30.04539
## 1117	40.58	40.39	29.80190
## 1118	40.59	40.98	30.23723

## 1119	40.59	41.05	30.28888
## 1120	41.29	41.67	30.74635
## 1121	42.13	41.61	30.70208
## 1122	41.02	40.68	30.01586
## 1123	40.63	40.36	29.77976
## 1124	40.85	40.80	30.10442
## 1125	40.50	40.48	29.86830
## 1126	40.68	40.91	30.18558
## 1127	40.67	40.69	30.02326
## 1128	40.12	40.07	29.56578
## 1129	40.05	39.49	29.13783
## 1130	39.40	39.88	29.42560
## 1131	40.07	39.54	29.17472
## 1132	40.04	40.45	29.84616
## 1133	40.72	40.94	30.20772
## 1134	40.81	41.58	30.86844
## 1135	41.51	41.03	30.46013
## 1136	40.59	40.56	30.11121
## 1137	41.19	41.32	30.67541
## 1138	40.70	40.74	30.24484
## 1139	40.19	39.43	29.27230
## 1140	39.24	39.39	29.24260
## 1141	39.67	39.62	29.41336
## 1142	41.18	40.35	29.95531
## 1143	40.61	39.98	29.68062
## 1144	39.79	39.83	29.56927
## 1145	39.92	40.39	29.98500
## 1146	40.69	40.96	30.40816
## 1147	41.57	42.29	31.39553
## 1148	42.27	42.19	31.32129
## 1149	41.52	41.69	30.95009
## 1150	41.50	41.44	30.76451
## 1151	41.20	40.67	30.19287
## 1152	40.69	40.68	30.20028
## 1153	40.24	40.45	30.02954
## 1154	41.16	40.44	30.02212
## 1155	40.10	39.84	29.57668
## 1156	39.76	39.90	29.62123
## 1157	39.31	37.92	28.15130
## 1158	38.30	37.60	27.91374
## 1159	36.23	34.06	25.28570
## 1160	35.38	36.40	27.02288
## 1161	35.52	34.37	25.51583
## 1162	34.63	36.69	27.23816
## 1163	37.13	35.91	26.65911
## 1164	36.53	36.88	27.37922
## 1165	36.27	36.03	26.74818
## 1166	36.46	36.57	27.14908
## 1167	35.27	35.19	26.12458
## 1168	34.76	34.35	25.50098
## 1169	35.12	33.41	24.80314
## 1170	33.29	34.78	25.82021
## 1171	34.82	35.83	26.59972
## 1172	37.79	35.72	26.51806

## 1173	35.28	36.21	26.88182
## 1174	36.82	37.64	27.94343
## 1175	37.40	37.06	27.51285
## 1176	37.42	37.56	27.88404
## 1177	37.62	36.30	26.94863
## 1178	35.06	34.63	25.70885
## 1179	33.11	33.44	24.82540
## 1180	34.10	34.82	25.84990
## 1181	34.44	33.51	24.87738
## 1182	33.08	32.08	23.81577
## 1183	31.35	32.42	24.06817
## 1184	32.81	32.49	24.12014
## 1185	32.73	32.80	24.35028
## 1186	33.37	33.81	25.10010
## 1187	34.05	33.43	24.81799
## 1188	32.69	32.49	24.12014
## 1189	32.77	32.25	23.94197
## 1190	32.23	30.34	22.52401
## 1191	29.35	29.27	21.72966
## 1192	28.96	29.59	21.96723
## 1193	30.06	31.65	23.49653
## 1194	32.62	31.57	23.43715
## 1195	31.62	30.47	22.62052
## 1196	31.58	31.39	23.30351
## 1197	30.74	30.12	22.36069
## 1198	30.03	28.65	21.26938
## 1199	28.25	30.26	22.66237
## 1200	30.23	30.84	23.09674
## 1201	30.71	32.38	24.25010
## 1202	32.58	30.70	22.99190
## 1203	31.60	32.30	24.19017
## 1204	31.98	32.30	24.19017
## 1205	32.76	33.20	24.86421
## 1206	32.45	31.60	23.66593
## 1207	31.87	31.89	23.88311
## 1208	31.64	31.04	23.24653
## 1209	31.36	32.87	24.61706
## 1210	32.77	32.25	24.15273
## 1211	32.32	33.13	24.81178
## 1212	33.48	33.42	25.02896
## 1213	33.61	34.57	25.89023
## 1214	34.18	33.49	25.08139
## 1215	34.11	34.18	25.59814
## 1216	36.56	37.02	27.72508
## 1217	36.61	36.69	27.47794
## 1218	35.93	34.76	26.03252
## 1219	32.47	32.71	24.49723
## 1220	33.71	33.64	25.19373
## 1221	34.12	34.38	25.74794
## 1222	33.99	33.97	25.44088
## 1223	34.03	34.24	25.64308
## 1224	34.53	35.02	26.22724
## 1225	33.84	32.54	24.36992
## 1226	32.92	32.74	24.51970

## 1227	33.28	33.28	24.92411
## 1228	32.95	32.55	24.37740
## 1229	32.09	32.70	24.48974
## 1230	32.34	31.47	23.56857
## 1231	31.40	30.49	22.83462
## 1232	30.67	30.62	22.93199
## 1233	30.02	29.91	22.40025
## 1234	29.90	29.41	22.02579
## 1235	29.11	28.38	21.25440
## 1236	28.28	28.48	21.32929
## 1237	29.71	29.16	21.83856
## 1238	28.98	28.56	21.38921
## 1239	30.15	30.97	23.19410
## 1240	30.86	30.46	22.81216
## 1241	30.88	32.33	24.21264
## 1242	33.64	33.51	25.09637
## 1243	33.26	33.23	24.88667
## 1244	32.82	34.00	25.46334
## 1245	33.55	32.22	24.13026
## 1246	32.36	33.18	24.84922
## 1247	32.55	32.04	23.99545
## 1248	32.37	31.29	23.43377
## 1249	30.88	31.51	23.59852
## 1250	32.10	31.76	23.78576
## 1251	32.16	31.89	23.88311
## 1252	31.87	30.70	22.99190
## 1253	31.40	32.21	24.12277
## 1254	32.00	32.32	24.20515
## 1255	32.69	33.45	25.05143
## 1256	33.62	33.57	25.14130
## 1257	33.22	33.03	24.73689
## 1258	32.99	32.65	24.45229
## 1259	32.71	33.42	25.02896
## 1260	33.11	33.25	24.90165
## 1261	34.06	34.98	26.19729
## 1262	34.44	34.95	26.36324
## 1263	34.71	35.68	26.91387
## 1264	35.69	35.36	26.67250
## 1265	35.44	35.30	26.62724
## 1266	36.07	36.05	27.19298
## 1267	35.80	36.66	27.65311
## 1268	36.82	36.85	27.79643
## 1269	35.26	35.92	27.09492
## 1270	34.85	34.91	26.33306
## 1271	34.54	36.54	27.56260
## 1272	36.84	36.93	27.85677
## 1273	36.78	37.36	28.18113
## 1274	37.31	37.66	28.40742
## 1275	37.18	37.66	28.40742
## 1276	37.36	37.60	28.36217
## 1277	37.88	37.49	28.27918
## 1278	37.23	37.21	28.06798
## 1279	36.66	37.01	27.91712
## 1280	37.53	37.30	28.13587

## 1281	37.89	37.60	28.36217
## 1282	37.69	37.55	28.32445
## 1283	38.27	38.28	28.87510
## 1284	38.06	38.14	28.76950
## 1285	37.86	37.87	28.56583
## 1286	38.05	38.30	28.89018
## 1287	38.60	37.86	28.55828
## 1288	37.22	37.61	28.36970
## 1289	38.08	38.30	28.89018
## 1290	38.23	37.92	28.60354
## 1291	38.08	37.40	28.21130
## 1292	37.15	38.00	28.66390
## 1293	38.60	38.47	29.01841
## 1294	38.65	38.46	29.01087
## 1295	38.30	38.07	28.71669
## 1296	38.06	38.49	29.03351
## 1297	38.66	38.28	28.87510
## 1298	38.07	39.06	29.46346
## 1299	39.13	39.21	29.57660
## 1300	39.33	39.24	29.59924
## 1301	39.51	40.37	30.45161
## 1302	40.43	40.63	30.64773
## 1303	40.70	40.40	30.47425
## 1304	39.45	39.32	29.65959
## 1305	39.46	39.95	30.13479
## 1306	40.47	40.44	30.50441
## 1307	40.75	41.03	30.94945
## 1308	40.86	40.54	30.57984
## 1309	41.02	43.39	32.72964
## 1310	43.62	43.58	32.87295
## 1311	43.64	44.70	33.71778
## 1312	44.87	44.57	33.61972
## 1313	44.44	45.00	33.94408
## 1314	44.53	45.38	34.23071
## 1315	45.53	45.12	34.03459
## 1316	44.72	44.65	33.68006
## 1317	44.45	45.16	34.06477
## 1318	45.48	46.17	34.82662
## 1319	45.92	45.89	34.61542
## 1320	45.76	46.27	34.90206
## 1321	45.92	45.67	34.44947
## 1322	46.08	45.98	34.68330
## 1323	45.75	46.13	34.79646
## 1324	45.74	45.42	34.48515
## 1325	44.68	44.41	33.71831
## 1326	44.13	44.34	33.66516
## 1327	43.19	43.89	33.32351
## 1328	43.88	42.96	32.61740
## 1329	43.59	44.01	33.41461
## 1330	44.12	44.84	34.04478
## 1331	44.95	43.21	32.80721
## 1332	43.38	43.33	32.89833
## 1333	43.69	43.90	33.33109
## 1334	43.62	43.29	32.86796

## 1335	43.44	43.22	32.81480
## 1336	43.51	42.72	32.43519
## 1337	41.92	42.85	32.53389
## 1338	42.98	43.28	32.86036
## 1339	43.65	43.16	32.76924
## 1340	43.22	43.80	33.25518
## 1341	43.94	43.34	32.90593
## 1342	43.33	42.98	32.63259
## 1343	43.00	43.79	33.24759
## 1344	43.46	43.20	32.79964
## 1345	43.38	43.01	32.65537
## 1346	42.33	41.75	31.69870
## 1347	41.43	41.78	31.72148
## 1348	41.50	41.38	31.41779
## 1349	40.72	40.64	30.85594
## 1350	41.23	40.74	30.93186
## 1351	37.14	36.96	28.06190
## 1352	36.10	35.79	27.17358
## 1353	36.19	36.24	27.51525
## 1354	36.79	35.46	26.92302
## 1355	35.04	33.93	25.76137
## 1356	33.99	33.49	25.42730
## 1357	33.52	32.51	24.68323
## 1358	33.32	34.01	25.82210
## 1359	33.62	34.26	26.01193
## 1360	34.44	33.97	25.79174
## 1361	34.00	33.50	25.43489
## 1362	33.98	33.63	25.53360
## 1363	33.30	32.96	25.02490
## 1364	32.96	33.15	25.16916
## 1365	32.41	31.93	24.24286
## 1366	32.16	31.00	23.53677
## 1367	30.89	31.99	24.28843
## 1368	32.71	33.07	25.10841
## 1369	33.77	32.81	24.91102
## 1370	32.77	33.68	25.57156
## 1371	34.37	32.82	24.91860
## 1372	32.88	33.77	25.63989
## 1373	33.69	34.30	26.04229
## 1374	34.41	34.65	26.30803
## 1375	34.89	35.03	26.59654
## 1376	34.71	34.62	26.28525
## 1377	34.99	35.38	26.86229
## 1378	36.03	36.45	27.67468
## 1379	36.49	35.51	26.96098
## 1380	36.02	35.99	27.32543
## 1381	35.26	35.32	26.81672
## 1382	36.06	35.71	27.11283
## 1383	35.64	36.78	27.92523
## 1384	35.32	35.88	27.24190
## 1385	36.70	35.73	27.12802
## 1386	36.27	36.28	27.54561
## 1387	35.96	35.88	27.46905
## 1388	35.61	34.38	26.32068

## 1389	33.92	33.90	25.95320
## 1390	33.81	33.96	25.99913
## 1391	34.22	34.25	26.22115
## 1392	34.21	34.59	26.48145
## 1393	34.33	34.04	26.06038
## 1394	35.06	36.07	27.61451
## 1395	35.76	35.09	26.86424
## 1396	35.44	34.99	26.78768
## 1397	34.75	34.96	26.76471
## 1398	35.02	34.46	26.38192
## 1399	34.05	33.90	25.95320
## 1400	33.24	34.44	26.36661
## 1401	34.58	34.73	26.58863
## 1402	34.98	35.17	26.92548
## 1403	35.78	35.81	27.41546
## 1404	36.01	36.89	28.24229
## 1405	36.50	36.14	27.66810
## 1406	36.11	36.00	27.56091
## 1407	36.19	36.00	27.56091
## 1408	35.62	35.17	26.92548
## 1409	35.82	36.09	27.62981
## 1410	36.24	36.30	27.79060
## 1411	36.57	37.01	28.33416
## 1412	36.85	37.16	28.44899
## 1413	36.72	36.92	28.26525
## 1414	36.76	36.97	28.30353
## 1415	36.87	36.99	28.31884
## 1416	37.42	37.10	28.40306
## 1417	37.07	37.07	28.38010
## 1418	37.18	37.10	28.40306
## 1419	37.20	36.98	28.31119
## 1420	36.92	37.37	28.60976
## 1421	37.63	38.04	29.12270
## 1422	37.88	37.83	28.96194
## 1423	37.81	37.23	28.50258
## 1424	36.94	37.17	28.45664
## 1425	37.31	37.23	28.50258
## 1426	37.10	37.13	28.42602
## 1427	37.32	37.30	28.55618
## 1428	37.06	36.90	28.24994
## 1429	37.14	37.14	28.43369
## 1430	36.98	37.01	28.33416
## 1431	37.08	37.11	28.41072
## 1432	37.58	38.69	29.62034
## 1433	39.04	39.30	30.08733
## 1434	39.23	38.76	29.67391
## 1435	38.80	39.60	30.31701
## 1436	39.88	39.92	30.56200
## 1437	39.84	41.40	31.69504
## 1438	41.96	41.57	31.82521
## 1439	41.00	41.19	31.53429
## 1440	41.05	41.26	31.58787
## 1441	41.33	41.34	31.64913
## 1442	40.96	41.25	31.58021

## 1443	41.53	40.88	31.29695
## 1444	40.61	41.23	31.56491
## 1445	41.55	40.55	31.04431
## 1446	40.15	40.24	30.80699
## 1447	40.40	40.68	31.14383
## 1448	40.42	40.48	30.99073
## 1449	40.88	40.97	31.36585
## 1450	41.14	40.92	31.32757
## 1451	40.83	40.86	31.51267
## 1452	41.16	41.82	32.25306
## 1453	42.04	41.71	32.16823
## 1454	41.33	41.66	32.12966
## 1455	41.77	41.38	31.91371
## 1456	41.55	41.77	32.21450
## 1457	42.37	42.10	32.46901
## 1458	41.60	41.62	32.09880
## 1459	41.91	42.38	32.68495
## 1460	42.79	42.83	33.03201
## 1461	42.93	43.32	33.40991
## 1462	43.09	43.01	33.17084
## 1463	42.80	42.32	32.63868
## 1464	42.25	42.09	32.46129
## 1465	41.47	41.33	31.87516
## 1466	41.68	41.71	32.16823
## 1467	42.24	41.67	32.13737
## 1468	41.42	41.16	31.74405
## 1469	41.45	41.68	32.14508
## 1470	41.70	42.84	33.03972
## 1471	43.04	42.42	32.71581
## 1472	42.33	42.27	32.60012
## 1473	42.57	42.88	33.07056
## 1474	42.01	40.48	31.21960
## 1475	41.28	40.40	31.15791
## 1476	40.31	40.62	31.32758
## 1477	40.85	40.58	31.29674
## 1478	40.18	40.04	30.88026
## 1479	40.21	39.29	30.30185
## 1480	39.06	39.39	30.37896
## 1481	39.43	39.53	30.48692
## 1482	40.09	40.59	31.30444
## 1483	40.33	40.70	31.38928
## 1484	40.94	40.73	31.41241
## 1485	41.10	41.09	31.69007
## 1486	40.79	40.88	31.52810
## 1487	40.87	40.75	31.42783
## 1488	40.49	40.83	31.48953
## 1489	41.15	41.22	31.79032
## 1490	40.99	41.08	31.68234
## 1491	41.27	40.81	31.47411
## 1492	40.78	40.57	31.28902
## 1493	40.69	41.20	31.77488
## 1494	41.25	41.47	31.98314
## 1495	41.84	42.56	32.82378
## 1496	42.54	42.31	32.63097

## 1497	42.60	42.64	32.88548
## 1498	43.00	42.77	32.98574
## 1499	42.65	42.78	32.99345
## 1500	42.77	42.81	33.01659
## 1501	43.00	43.48	33.53331
## 1502	43.83	43.87	33.83409
## 1503	43.99	43.53	33.57187
## 1504	43.69	44.53	34.34310
## 1505	43.82	44.00	33.93435
## 1506	43.72	43.92	33.87265
## 1507	43.95	43.96	33.90351
## 1508	43.96	43.63	33.64899
## 1509	43.10	43.24	33.34821
## 1510	43.10	43.97	33.91122
## 1511	44.98	44.66	34.67998
## 1512	44.74	44.57	34.61010
## 1513	44.45	45.36	35.22356
## 1514	45.09	45.41	35.26238
## 1515	45.40	45.50	35.33228
## 1516	45.56	45.47	35.30897
## 1517	45.89	46.15	35.83701
## 1518	45.97	46.14	35.82925
## 1519	45.89	45.88	35.62735
## 1520	45.49	46.35	35.99233
## 1521	45.91	46.82	36.35729
## 1522	46.40	46.44	36.06221
## 1523	46.38	46.46	36.07774
## 1524	46.25	46.54	36.13987
## 1525	46.23	46.23	35.89914
## 1526	46.24	46.37	36.00785
## 1527	46.74	47.16	36.62132
## 1528	46.84	46.64	36.21752
## 1529	46.28	47.12	36.59026
## 1530	47.04	47.13	36.59802
## 1531	47.01	47.05	36.53590
## 1532	47.40	47.85	37.15713
## 1533	47.54	47.68	37.02512
## 1534	47.94	48.79	37.88707
## 1535	48.42	48.61	37.74730
## 1536	48.65	48.23	37.45221
## 1537	48.33	48.63	37.76283
## 1538	48.51	48.66	37.78611
## 1539	48.80	49.14	38.15886
## 1540	49.35	48.68	37.80165
## 1541	48.40	49.22	38.22099
## 1542	49.35	48.88	37.95694
## 1543	49.12	49.45	38.39957
## 1544	49.35	48.61	37.74730
## 1545	48.41	48.25	37.46775
## 1546	48.63	48.91	37.98024
## 1547	49.10	47.70	37.04065
## 1548	48.22	47.60	36.96299
## 1549	47.85	49.28	38.26757
## 1550	49.16	48.92	37.98801

## 1551	48.60	48.91	37.98024
## 1552	48.73	49.10	38.12780
## 1553	49.49	49.49	38.43065
## 1554	49.88	50.03	38.84997
## 1555	50.05	50.63	39.31589
## 1556	50.59	50.20	38.98198
## 1557	50.23	50.48	39.19941
## 1558	50.35	50.28	39.04411
## 1559	50.29	50.16	38.95092
## 1560	50.25	51.00	39.60319
## 1561	49.97	50.02	38.84220
## 1562	49.19	49.51	38.44617
## 1563	49.65	49.20	38.20543
## 1564	49.57	49.12	38.14332
## 1565	48.79	48.35	37.54539
## 1566	48.63	48.78	37.87930
## 1567	49.04	48.52	37.67740
## 1568	48.74	48.64	37.77059
## 1569	48.20	47.77	37.09501
## 1570	47.84	47.46	36.85428
## 1571	47.55	47.83	37.14160
## 1572	48.01	48.28	37.49104
## 1573	48.03	46.85	36.60807
## 1574	46.96	47.49	37.10815
## 1575	46.79	47.91	37.43634
## 1576	47.88	48.58	37.95987
## 1577	48.74	48.68	38.03801
## 1578	48.94	49.25	38.48340
## 1579	49.21	49.31	38.53028
## 1580	48.90	49.01	38.29587
## 1581	48.39	47.93	37.45197
## 1582	48.43	48.49	37.88953
## 1583	48.11	46.79	36.56117
## 1584	46.80	46.64	36.44397
## 1585	47.15	47.23	36.90499
## 1586	47.40	47.35	36.99876
## 1587	47.68	48.17	37.63951
## 1588	48.32	48.72	38.06927
## 1589	49.02	49.00	38.28806
## 1590	48.86	48.88	38.19429
## 1591	49.08	48.92	38.22554
## 1592	48.96	49.01	38.29587
## 1593	48.76	48.01	37.51448
## 1594	48.25	48.08	37.56918
## 1595	48.63	47.57	37.17066
## 1596	47.71	48.18	37.64731
## 1597	48.57	49.14	38.39745
## 1598	49.22	49.76	38.88189
## 1599	49.70	49.04	38.31930
## 1600	49.05	48.96	38.25679
## 1601	48.84	49.67	38.81158
## 1602	49.77	50.23	39.24917
## 1603	50.20	51.09	39.92115
## 1604	50.87	50.97	39.82739

## 1605	51.26	52.30	40.86664
## 1606	52.28	52.29	40.85882
## 1607	52.53	53.02	41.42924
## 1608	53.43	53.63	41.90588
## 1609	52.82	53.35	41.68710
## 1610	52.90	53.66	41.92933
## 1611	54.56	54.60	42.66382
## 1612	54.09	54.67	42.71852
## 1613	54.60	55.62	43.46085
## 1614	55.71	54.59	42.65602
## 1615	54.60	54.49	42.57789
## 1616	54.54	54.04	42.22625
## 1617	53.78	53.03	41.43705
## 1618	52.84	53.50	41.80430
## 1619	53.77	54.27	42.40596
## 1620	54.64	54.36	42.47630
## 1621	53.46	53.49	41.79649
## 1622	53.90	53.18	41.55426
## 1623	53.00	54.17	42.32783
## 1624	54.04	53.13	41.51518
## 1625	53.70	53.85	42.07778
## 1626	54.03	54.11	42.28095
## 1627	53.99	53.55	41.84336
## 1628	53.08	52.48	41.00728
## 1629	52.96	51.96	40.60097
## 1630	50.88	50.92	39.78831
## 1631	51.51	52.08	40.69473
## 1632	52.65	52.50	41.02291
## 1633	53.03	53.15	41.53081
## 1634	53.12	52.79	41.24952
## 1635	53.22	52.49	41.01510
## 1636	52.57	52.80	41.55818
## 1637	52.31	52.77	41.53458
## 1638	53.36	53.99	42.49482
## 1639	54.54	54.70	43.05366
## 1640	55.07	54.89	43.20320
## 1641	54.77	54.83	43.15597
## 1642	55.84	55.14	43.39996
## 1643	55.51	54.97	43.26617
## 1644	55.49	54.89	43.20320
## 1645	54.90	55.01	43.29764
## 1646	55.05	55.27	43.50230
## 1647	55.51	56.37	44.36808
## 1648	56.51	56.16	44.20280
## 1649	56.17	56.56	44.51763
## 1650	56.72	56.67	44.60421
## 1651	56.92	56.63	44.57274
## 1652	56.45	56.50	44.47041
## 1653	56.06	56.05	44.11622
## 1654	55.98	55.69	43.83287
## 1655	55.87	55.33	43.54951
## 1656	55.58	55.73	43.86436
## 1657	56.36	56.54	44.50190
## 1658	56.27	56.49	44.46254

## 1659	56.33	56.10	44.15557
## 1660	55.99	55.49	43.67545
## 1661	55.06	55.30	43.52590
## 1662	55.42	54.83	43.15597
## 1663	54.69	54.52	42.91198
## 1664	54.04	54.09	42.57353
## 1665	54.22	54.29	42.73095
## 1666	54.33	54.15	42.62076
## 1667	53.52	53.29	41.94386
## 1668	53.07	53.29	41.94386
## 1669	52.89	51.83	40.79472
## 1670	51.78	52.12	41.02297
## 1671	51.92	51.63	40.63730
## 1672	52.00	52.21	41.09380
## 1673	52.27	52.32	41.18039
## 1674	52.16	51.80	40.77110
## 1675	51.02	50.60	39.82660
## 1676	50.33	50.58	39.81085
## 1677	50.59	50.70	39.90530
## 1678	50.82	50.53	39.77151
## 1679	51.25	51.13	40.24376
## 1680	51.16	51.87	40.82620
## 1681	52.03	52.11	41.01509
## 1682	52.41	52.56	41.36929
## 1683	52.78	52.86	41.60542
## 1684	53.83	53.67	42.24295
## 1685	53.37	53.26	41.92025
## 1686	53.43	52.24	41.11743
## 1687	52.29	52.59	41.39290
## 1688	53.45	53.14	41.82581
## 1689	53.19	53.09	41.78645
## 1690	52.69	53.41	42.03831
## 1691	53.63	52.75	41.51883
## 1692	52.95	52.80	41.55818
## 1693	52.08	51.46	40.50348
## 1694	51.01	50.32	39.60622
## 1695	50.22	51.70	40.69239
## 1696	51.93	51.89	40.84193
## 1697	51.50	52.24	41.11743
## 1698	51.73	51.69	40.68453
## 1699	51.64	51.96	40.89704
## 1700	51.32	52.09	41.30141
## 1701	52.00	51.94	41.18248
## 1702	52.07	52.67	41.76128
## 1703	52.29	51.83	41.09526
## 1704	51.83	50.87	40.33408
## 1705	51.17	50.75	40.23895
## 1706	51.84	52.52	41.64234
## 1707	52.96	52.51	41.63441
## 1708	51.94	52.71	41.79300
## 1709	52.91	52.31	41.47583
## 1710	52.61	54.00	42.81581
## 1711	53.79	54.21	42.98233
## 1712	54.26	54.30	43.05368

## 1713	54.27	54.27	43.02990
## 1714	54.65	53.62	42.51452
## 1715	53.31	52.75	41.82470
## 1716	52.84	52.48	41.61063
## 1717	52.16	52.77	41.84057
## 1718	52.89	52.68	41.76922
## 1719	52.83	52.73	41.80885
## 1720	53.00	52.60	41.70578
## 1721	52.65	51.54	40.86532
## 1722	51.45	52.51	41.63441
## 1723	52.74	52.04	41.26177
## 1724	51.85	51.95	41.19040
## 1725	52.26	52.10	41.30934
## 1726	52.13	51.65	40.95254
## 1727	51.83	53.96	42.78410
## 1728	53.91	54.10	42.89510
## 1729	53.93	53.97	42.79203
## 1730	53.52	54.14	42.92682
## 1731	54.26	54.40	43.13298
## 1732	54.27	54.87	43.50561
## 1733	55.49	55.74	44.19544
## 1734	55.97	56.15	44.52052
## 1735	56.43	56.10	44.48087
## 1736	56.28	57.22	45.36891
## 1737	57.25	57.46	45.55920
## 1738	57.50	57.65	45.70984
## 1739	57.63	57.17	45.32927
## 1740	57.58	57.48	45.57506
## 1741	57.58	57.22	45.36891
## 1742	57.10	56.98	45.17863
## 1743	56.89	56.86	45.08347
## 1744	56.44	57.19	45.34513
## 1745	56.71	55.82	44.25887
## 1746	56.57	56.06	44.44917
## 1747	56.28	56.51	44.80595
## 1748	56.49	56.70	44.95661
## 1749	56.54	56.07	44.45710
## 1750	56.05	56.31	44.64738
## 1751	56.37	56.17	44.53638
## 1752	56.34	56.42	44.73460
## 1753	56.66	55.72	44.17958
## 1754	55.84	57.24	45.38477
## 1755	57.10	57.23	45.37683
## 1756	57.21	57.70	45.74950
## 1757	57.97	58.24	46.17765
## 1758	58.07	58.25	46.18558
## 1759	58.35	58.20	46.14594
## 1760	58.17	58.14	46.09837
## 1761	58.14	57.95	45.94772
## 1762	58.20	58.48	46.36795
## 1763	58.31	58.21	46.45573
## 1764	58.29	58.66	46.81485
## 1765	59.16	59.00	47.08621
## 1766	59.29	58.32	46.54352

## 1767	58.54	58.87	46.98245
## 1768	58.98	58.76	46.89467
## 1769	58.67	58.49	46.67919
## 1770	58.51	57.70	46.04872
## 1771	58.30	57.74	46.08064
## 1772	57.73	59.49	47.47726
## 1773	58.79	58.99	47.07822
## 1774	59.21	58.11	46.37593
## 1775	58.09	58.17	46.42380
## 1776	58.33	57.59	45.96092
## 1777	57.09	56.47	45.06708
## 1778	56.00	55.09	43.96574
## 1779	55.08	55.09	43.96574
## 1780	55.39	55.74	44.48449
## 1781	54.96	55.53	44.31691
## 1782	56.07	56.00	44.69199
## 1783	55.50	55.36	44.18122
## 1784	55.50	54.31	43.34327
## 1785	54.72	54.95	43.85402
## 1786	55.10	55.21	44.06153
## 1787	55.35	56.48	45.07506
## 1788	56.65	56.62	45.18680
## 1789	56.77	56.74	45.28257
## 1790	56.61	57.43	45.83324
## 1791	57.34	57.52	45.90506
## 1792	57.07	58.03	46.31207
## 1793	57.89	58.15	46.40784
## 1794	58.02	58.49	46.67919
## 1795	58.36	57.26	45.69756
## 1796	57.53	57.58	45.95295
## 1797	57.59	57.61	45.97689
## 1798	57.62	58.03	46.31207
## 1799	57.90	57.03	45.51400
## 1800	57.37	56.75	45.29054
## 1801	56.78	56.69	45.24265
## 1802	56.57	56.82	45.34641
## 1803	56.30	56.21	44.85959
## 1804	56.95	57.26	45.69756
## 1805	57.48	58.16	46.41583
## 1806	58.51	58.90	47.00640
## 1807	59.35	59.40	47.40543
## 1808	59.14	59.20	47.24582
## 1809	59.42	58.19	46.43976
## 1810	57.70	57.92	46.22429
## 1811	58.00	57.42	45.82526
## 1812	57.11	56.80	45.33046
## 1813	57.21	57.58	45.95295
## 1814	57.82	58.06	46.33602
## 1815	57.99	58.30	46.52756
## 1816	58.36	60.11	47.97207
## 1817	60.96	60.17	48.01995
## 1818	60.37	61.07	48.73822
## 1819	61.11	60.93	48.62648
## 1820	61.24	59.90	47.80447

## 1821	59.94	59.92	47.82043
## 1822	60.21	60.04	47.91621
## 1823	60.83	60.71	48.45092
## 1824	60.95	60.67	48.41900
## 1825	60.37	60.48	48.57158
## 1826	60.65	60.66	48.71613
## 1827	61.02	59.81	48.03349
## 1828	59.69	59.00	47.38299
## 1829	58.80	58.85	47.26252
## 1830	59.10	59.27	47.59982
## 1831	59.35	57.40	46.09802
## 1832	55.18	55.30	44.41151
## 1833	55.85	54.96	44.13846
## 1834	55.09	54.80	44.00996
## 1835	55.00	55.26	44.37938
## 1836	55.34	55.22	44.34726
## 1837	55.26	55.03	44.19468
## 1838	55.04	55.81	44.82109
## 1839	55.80	56.05	45.01384
## 1840	56.07	56.19	45.12627
## 1841	56.31	55.70	44.73275
## 1842	55.63	55.49	44.56411
## 1843	55.73	56.10	45.05400
## 1844	56.24	55.98	44.95762
## 1845	55.92	55.72	44.74881
## 1846	55.83	55.58	44.63638
## 1847	53.88	54.22	43.54416
## 1848	54.04	53.34	42.83742
## 1849	53.55	54.05	43.40763
## 1850	54.20	54.36	43.65659
## 1851	54.22	54.01	43.37551
## 1852	54.27	54.65	43.88950
## 1853	54.74	54.62	43.86539
## 1854	54.64	54.36	43.65659
## 1855	54.20	53.51	42.97396
## 1856	53.42	53.31	42.81334
## 1857	53.08	53.83	43.23096
## 1858	53.72	53.72	43.14261
## 1859	54.05	54.12	43.46385
## 1860	54.17	54.55	43.80919
## 1861	54.55	54.53	43.79312
## 1862	54.75	55.14	44.28301
## 1863	55.09	55.45	44.53198
## 1864	55.75	55.72	44.74881
## 1865	55.58	55.57	44.62835
## 1866	55.65	55.35	44.45167
## 1867	55.09	55.60	44.65243
## 1868	55.52	55.68	44.71670
## 1869	55.91	56.63	45.47963
## 1870	56.76	56.97	45.75269
## 1871	56.91	57.42	46.11408
## 1872	57.47	57.90	46.49958
## 1873	57.48	57.27	45.99362
## 1874	57.07	57.04	45.80890

## 1875	57.03	57.04	45.80890
## 1876	56.85	56.87	45.67237
## 1877	56.79	57.42	46.11408
## 1878	57.29	57.78	46.40319
## 1879	57.69	57.30	46.01771
## 1880	57.69	57.55	46.21849
## 1881	57.54	58.19	46.73246
## 1882	57.88	57.42	46.11408
## 1883	57.22	57.53	46.20242
## 1884	57.34	57.39	46.08999
## 1885	57.33	57.53	46.20242
## 1886	57.44	57.62	46.27470
## 1887	57.15	57.57	46.55776
## 1888	57.27	56.97	46.07253
## 1889	57.23	57.05	46.13722
## 1890	56.89	56.67	45.82991
## 1891	56.35	55.76	45.09398
## 1892	55.88	56.02	45.30424
## 1893	55.06	55.56	44.93224
## 1894	55.29	55.80	45.12633
## 1895	56.53	56.29	45.52259
## 1896	57.95	58.27	47.12386
## 1897	58.51	58.71	47.47968
## 1898	58.56	57.86	46.79227
## 1899	58.33	58.23	47.09152
## 1900	58.12	58.24	47.09959
## 1901	58.42	58.67	47.44735
## 1902	58.76	59.00	47.71422
## 1903	59.07	59.17	47.85169
## 1904	58.92	59.01	47.72231
## 1905	58.94	59.19	47.86787
## 1906	59.13	58.64	47.42308
## 1907	59.02	58.91	47.64143
## 1908	58.65	57.67	46.63863
## 1909	57.39	56.48	45.67625
## 1910	56.91	56.65	45.81373
## 1911	56.43	56.06	45.33660
## 1912	55.89	56.23	45.47408
## 1913	56.63	55.91	45.21528
## 1914	55.89	56.34	45.56304
## 1915	56.54	56.32	45.54686
## 1916	56.23	56.35	45.57111
## 1917	56.69	56.72	45.87034
## 1918	56.77	56.98	46.08060
## 1919	57.24	56.75	45.89461
## 1920	56.86	57.23	46.28280
## 1921	57.60	57.56	46.54966
## 1922	57.42	57.64	46.61437
## 1923	57.66	58.50	47.30986
## 1924	58.44	58.49	47.30178
## 1925	58.98	59.34	47.98919
## 1926	59.57	59.74	48.31267
## 1927	59.85	59.59	48.19136
## 1928	59.25	59.16	47.84362

## 1929	59.34	59.45	48.07813
## 1930	59.46	59.67	48.25606
## 1931	60.02	59.70	48.28031
## 1932	59.63	59.71	48.28841
## 1933	59.62	59.91	48.45014
## 1934	59.84	59.89	48.43396
## 1935	59.63	59.06	47.76274
## 1936	59.15	59.22	47.89214
## 1937	59.18	59.76	48.32884
## 1938	59.80	60.03	48.54719
## 1939	59.78	59.94	48.47441
## 1940	59.71	59.99	48.51486
## 1941	59.95	60.31	48.77364
## 1942	60.54	61.32	49.59043
## 1943	61.74	61.11	49.42061
## 1944	60.94	60.91	49.25887
## 1945	60.82	60.94	49.28313
## 1946	61.18	61.63	49.84113
## 1947	61.49	60.15	48.64424
## 1948	60.33	60.56	48.97581
## 1949	60.03	60.33	48.78982
## 1950	60.40	60.24	48.71702
## 1951	60.24	59.77	48.33693
## 1952	59.15	58.84	47.90543
## 1953	59.25	60.30	49.09409
## 1954	60.78	60.18	48.99640
## 1955	59.92	59.27	48.25552
## 1956	59.36	60.40	49.17551
## 1957	60.33	59.08	48.10082
## 1958	59.03	58.52	47.64489
## 1959	58.50	58.16	47.35180
## 1960	56.69	57.99	47.21339
## 1961	57.02	55.53	45.21054
## 1962	54.75	55.08	44.84417
## 1963	55.73	56.20	45.75603
## 1964	56.10	56.63	46.10612
## 1965	57.23	57.93	47.16454
## 1966	58.04	57.45	46.77374
## 1967	58.12	58.06	47.27037
## 1968	58.00	58.74	47.82401
## 1969	58.45	58.64	47.74259
## 1970	58.87	59.63	48.54861
## 1971	59.62	59.29	48.27179
## 1972	58.94	59.39	48.35321
## 1973	60.12	60.48	49.24066
## 1974	60.79	60.88	49.56632
## 1975	60.24	60.25	49.05340
## 1976	60.80	61.15	49.78614
## 1977	61.08	61.23	49.85128
## 1978	61.07	61.47	50.04669
## 1979	61.25	61.93	50.42119
## 1980	61.71	61.37	49.96526
## 1981	60.42	60.56	49.30577
## 1982	60.50	60.23	49.03711

## 1983	60.25	60.28	49.07782
## 1984	60.00	60.38	49.15924
## 1985	60.35	60.53	49.28136
## 1986	60.45	60.60	49.33834
## 1987	60.20	60.12	48.94755
## 1988	61.07	60.45	49.21622
## 1989	60.70	60.96	49.63145
## 1990	61.16	60.30	49.09409
## 1991	60.57	60.34	49.12666
## 1992	60.40	60.16	48.98012
## 1993	59.98	60.00	48.84984
## 1994	60.01	61.08	49.72915
## 1995	60.96	61.54	50.10368
## 1996	61.10	61.38	49.97340
## 1997	62.01	62.70	51.04810
## 1998	62.60	62.67	51.02367
## 1999	61.85	62.45	50.84455
## 2000	62.16	60.68	49.40348
## 2001	61.17	61.14	49.77800
## 2002	60.53	60.04	48.88242
## 2003	60.74	59.16	48.16595
## 2004	58.42	58.43	47.57162
## 2005	58.57	59.77	48.66260
## 2006	60.64	61.48	50.05482
## 2007	61.40	61.93	50.42119
## 2008	62.16	61.94	50.42933
## 2009	62.05	62.48	50.86898
## 2010	62.74	62.48	50.86898
## 2011	62.67	62.55	50.92598
## 2012	62.42	62.96	51.25979
## 2013	62.72	63.15	51.41445
## 2014	63.30	62.58	50.95039
## 2015	62.18	62.49	51.20442
## 2016	62.06	60.55	49.61477
## 2017	60.64	58.98	48.32831
## 2018	59.89	59.07	48.40205
## 2019	59.97	60.39	49.48366
## 2020	60.72	59.34	48.62330
## 2021	59.28	58.83	48.20541
## 2022	59.26	58.84	48.21360
## 2023	58.84	56.81	46.55021
## 2024	55.73	54.99	45.05890
## 2025	54.66	55.93	45.82914
## 2026	56.04	55.71	45.64886
## 2027	55.45	55.89	45.79637
## 2028	56.38	57.59	47.18934
## 2029	57.72	56.68	46.44369
## 2030	56.41	56.77	46.51744
## 2031	56.05	56.20	46.05038
## 2032	56.62	54.75	44.86224
## 2033	55.27	55.67	45.61609
## 2034	54.99	54.38	44.55906
## 2035	54.53	55.47	45.45221
## 2036	55.91	56.72	46.47646

## 2037	56.32	56.38	46.19787
## 2038	56.86	56.77	46.51744
## 2039	57.75	57.89	47.43516
## 2040	57.42	57.82	47.37781
## 2041	58.42	58.46	47.90223
## 2042	58.06	58.37	47.82849
## 2043	58.93	59.57	48.81176
## 2044	59.46	59.67	48.89370
## 2045	59.36	60.10	49.24604
## 2046	60.10	59.37	48.64787
## 2047	59.15	59.23	48.53315
## 2048	58.96	59.80	49.00021
## 2049	59.50	59.35	48.63148
## 2050	60.25	60.82	49.83601
## 2051	60.76	61.14	50.09822
## 2052	61.03	61.58	50.45875
## 2053	61.13	61.28	50.21294
## 2054	61.28	61.77	50.61445
## 2055	61.65	61.97	50.77833
## 2056	61.64	62.13	50.90943
## 2057	62.20	62.00	50.80291
## 2058	62.16	60.89	49.89337
## 2059	60.84	61.50	50.39320
## 2060	60.76	59.96	49.13131
## 2061	60.13	60.24	49.36076
## 2062	60.65	61.37	50.28668
## 2063	61.40	61.00	49.98351
## 2064	61.50	61.85	50.67999
## 2065	61.34	61.61	50.48334
## 2066	61.39	61.75	50.59804
## 2067	61.57	61.20	50.14739
## 2068	61.32	61.75	50.59804
## 2069	61.75	61.14	50.09822
## 2070	60.97	60.46	49.54102
## 2071	60.53	59.61	48.84454
## 2072	59.46	59.54	48.78718
## 2073	59.49	59.55	48.79537
## 2074	60.88	60.96	49.95073
## 2075	60.72	60.58	49.63936
## 2076	60.41	59.95	49.44963
## 2077	60.07	60.52	49.91981
## 2078	59.92	60.47	49.87856
## 2079	61.15	60.85	50.19201
## 2080	61.06	61.05	50.35697
## 2081	61.27	61.47	50.70341
## 2082	61.35	61.70	50.89312
## 2083	61.64	62.07	51.19830
## 2084	62.96	63.04	51.99843
## 2085	63.08	64.21	52.96349
## 2086	64.08	63.81	52.63356
## 2087	63.25	62.84	51.83345
## 2088	63.22	63.24	52.16339
## 2089	63.33	62.31	51.39627
## 2090	62.65	62.94	51.91594

## 2091	62.79	62.80	51.80045
## 2092	62.63	62.60	51.63549
## 2093	62.70	62.34	51.42102
## 2094	62.49	62.76	51.76747
## 2095	62.56	63.60	52.46034
## 2096	63.58	63.26	52.17987
## 2097	63.70	63.61	52.46858
## 2098	63.68	64.72	53.38417
## 2099	64.51	64.40	53.12023
## 2100	64.53	63.92	52.72427
## 2101	63.67	64.50	53.20269
## 2102	64.97	65.49	54.01930
## 2103	65.26	65.45	53.98630
## 2104	65.31	65.36	53.91206
## 2105	65.42	65.52	54.04404
## 2106	65.83	66.05	54.48121
## 2107	66.13	65.88	54.34098
## 2108	65.80	66.42	54.78640
## 2109	66.77	67.01	55.27307
## 2110	66.95	66.48	54.83591
## 2111	66.14	66.65	54.97612
## 2112	66.63	66.47	54.82764
## 2113	66.20	65.73	54.21726
## 2114	65.95	66.47	54.82764
## 2115	66.36	66.20	54.60493
## 2116	66.18	65.78	54.25850
## 2117	65.99	66.08	54.50596
## 2118	65.83	66.02	54.45646
## 2119	66.43	66.70	55.01736
## 2120	66.31	66.33	54.71217
## 2121	67.37	67.42	55.61126
## 2122	67.46	66.89	55.17408
## 2123	66.95	67.18	55.41329
## 2124	67.59	68.26	56.30413
## 2125	68.36	68.52	56.51860
## 2126	68.31	68.25	56.29588
## 2127	67.58	67.99	56.08141
## 2128	67.77	68.37	56.39486
## 2129	68.41	68.14	56.20514
## 2130	68.35	68.78	56.73305
## 2131	68.46	68.08	56.15566
## 2132	68.87	68.96	56.88152
## 2133	69.35	69.75	57.53315
## 2134	69.51	69.02	56.93100
## 2135	69.32	68.65	56.62582
## 2136	68.94	68.95	56.87328
## 2137	67.68	67.20	55.42978
## 2138	67.89	67.76	55.89171
## 2139	68.12	68.07	56.51437
## 2140	67.95	67.52	56.05774
## 2141	66.88	67.33	55.90001
## 2142	67.09	66.80	55.45997
## 2143	66.00	65.43	54.32255
## 2144	66.49	66.11	54.88711

## 2145	67.22	67.05	55.66754
## 2146	67.89	68.09	56.53098
## 2147	67.98	69.04	57.31971
## 2148	69.23	69.19	57.44425
## 2149	69.63	69.56	57.75143
## 2150	69.35	69.21	57.46086
## 2151	69.50	69.26	57.50236
## 2152	69.16	69.10	57.36953
## 2153	69.28	70.08	58.18317
## 2154	70.19	69.64	57.81786
## 2155	69.44	68.91	57.21180
## 2156	68.15	68.01	56.46457
## 2157	68.55	68.05	56.49778
## 2158	68.32	68.94	57.23668
## 2159	68.93	69.04	57.31971
## 2160	69.01	68.53	56.89630
## 2161	68.59	68.53	56.89630
## 2162	68.47	68.46	56.83817
## 2163	69.05	68.73	57.06234
## 2164	68.75	68.25	56.66381
## 2165	68.33	68.05	56.49778
## 2166	68.22	68.89	57.19519
## 2167	68.23	68.23	56.64723
## 2168	67.41	67.24	55.82528
## 2169	67.25	67.55	56.08266
## 2170	67.42	67.89	56.36495
## 2171	67.62	68.07	56.51437
## 2172	67.98	68.21	56.63061
## 2173	67.93	67.60	56.12416
## 2174	66.81	65.94	54.74598
## 2175	65.09	63.60	52.80321
## 2176	59.29	60.25	50.02191
## 2177	63.10	59.91	49.73962
## 2178	61.80	62.91	52.23035
## 2179	63.98	64.48	53.53382
## 2180	64.29	64.13	53.24324
## 2181	63.61	64.10	53.21833
## 2182	62.85	61.45	51.01820
## 2183	62.62	62.57	51.94807
## 2184	62.88	62.68	52.03939
## 2185	61.80	61.50	51.05970
## 2186	62.77	63.16	52.43791
## 2187	63.94	62.18	51.62428
## 2188	61.86	62.66	52.02278
## 2189	62.38	62.56	51.93977
## 2190	62.64	62.38	51.79033
## 2191	62.76	63.58	52.78661
## 2192	63.89	64.14	53.25154
## 2193	64.14	62.65	52.01449
## 2194	61.83	60.94	50.59478
## 2195	61.52	61.45	51.01820
## 2196	60.60	60.91	50.56987
## 2197	60.80	60.64	50.34570
## 2198	60.01	60.22	49.99701

##	2199	61.27	61.47	51.03480
##	2200	60.92	59.98	49.79774
##	2201	59.98	59.84	49.68151
##	2202	60.70	60.97	50.61969
##	2203	61.12	61.42	50.99330
##	2204	59.59	60.81	50.85114
##	2205	61.24	62.02	51.86297
##	2206	62.11	62.05	51.88804
##	2207	62.55	62.13	51.95496
##	2208	61.85	62.13	51.95496
##	2209	62.39	61.93	51.78770
##	2210	61.84	61.72	51.61210
##	2211	61.39	61.55	51.46994
##	2212	60.76	59.99	50.16542
##	2213	60.47	61.89	51.75426
##	2214	62.43	62.43	52.20582
##	2215	62.00	62.22	52.03021
##	2216	62.36	62.52	52.28109
##	2217	62.88	62.06	51.89642
##	2218	62.42	63.19	52.84135
##	2219	63.63	63.87	53.41000
##	2220	63.84	63.90	53.43507
##	2221	63.53	63.64	53.21766
##	2222	63.70	65.50	54.77305
##	2223	65.26	65.21	54.53054
##	2224	65.30	64.25	53.72776
##	2225	64.45	65.54	54.80650
##	2226	65.29	65.78	55.00719
##	2227	66.01	65.85	55.06573
##	2228	65.79	66.44	55.55911
##	2229	68.37	68.46	57.24829
##	2230	68.70	67.39	56.35352
##	2231	67.19	67.68	56.59602
##	2232	68.10	67.35	56.32008
##	2233	66.86	66.00	55.19117
##	2234	65.84	65.56	54.82323
##	2235	65.46	66.51	55.61764
##	2236	66.67	66.13	55.29987
##	2237	66.48	67.45	56.40370
##	2238	67.58	67.66	56.57930
##	2239	67.99	67.54	56.47895
##	2240	67.31	66.88	55.92704
##	2241	66.17	66.78	55.84343
##	2242	66.93	66.86	55.91032
##	2243	67.00	67.17	56.16954
##	2244	67.28	66.68	55.75979
##	2245	67.34	67.61	56.53749
##	2246	67.83	66.66	55.74308
##	2247	66.83	65.80	55.02392
##	2248	66.10	67.89	56.77164
##	2249	67.66	67.00	56.02739
##	2250	66.25	65.96	55.15773
##	2251	65.61	65.46	54.73959
##	2252	65.54	65.61	54.86504

## 2253	64.80	64.07	53.57725
## 2254	64.23	64.27	53.74448
## 2255	65.07	66.10	55.27478
## 2256	66.91	67.53	56.47060
## 2257	67.90	66.28	55.42531
## 2258	65.97	64.40	53.85319
## 2259	65.02	65.54	54.80650
## 2260	65.92	65.68	54.92358
## 2261	66.12	66.73	55.80162
## 2262	66.62	66.60	55.69291
## 2263	66.29	66.38	55.50893
## 2264	66.84	67.07	56.08593
## 2265	67.04	66.59	55.68454
## 2266	66.19	66.03	55.21625
## 2267	63.95	63.62	53.55782
## 2268	63.70	63.73	53.65043
## 2269	62.72	62.81	52.87592
## 2270	61.46	60.27	50.73766
## 2271	61.13	58.92	49.60118
## 2272	58.83	58.83	49.52542
## 2273	59.45	58.96	49.63484
## 2274	59.46	57.34	48.27108
## 2275	58.16	58.20	48.99505
## 2276	56.45	57.04	48.01852
## 2277	57.73	57.01	47.99326
## 2278	55.63	55.51	46.73050
## 2279	55.74	55.25	46.51164
## 2280	56.44	56.95	47.94276
## 2281	56.48	55.66	46.85678
## 2282	55.85	57.08	48.05220
## 2283	57.08	57.04	48.01852
## 2284	57.52	57.28	48.22056
## 2285	57.83	59.50	50.08945
## 2286	59.16	58.86	49.55067
## 2287	57.88	57.03	48.01010
## 2288	57.37	57.41	48.33000
## 2289	57.06	58.40	49.16342
## 2290	58.58	57.75	48.61623
## 2291	56.69	56.54	47.59760
## 2292	55.29	56.20	47.31138
## 2293	56.57	55.52	46.73893
## 2294	53.90	53.07	44.67642
## 2295	55.65	57.49	48.39734
## 2296	58.23	58.35	49.12133
## 2297	58.85	58.77	49.47491
## 2298	58.84	57.81	48.66674
## 2299	57.50	57.82	48.67516
## 2300	58.51	58.57	49.30654
## 2301	57.90	56.12	47.24401
## 2302	55.20	56.14	47.26086
## 2303	56.13	57.01	47.99326
## 2304	57.64	57.54	48.43944
## 2305	57.41	56.30	47.39557
## 2306	56.76	59.20	49.83689

## 2307	59.20	59.76	50.30833
## 2308	59.58	59.96	50.47670
## 2309	60.10	60.05	50.55246
## 2310	59.54	59.94	50.45987
## 2311	59.21	58.78	49.48332
## 2312	59.15	59.12	49.76955
## 2313	59.59	58.61	49.34021
## 2314	59.39	59.34	49.95475
## 2315	59.15	59.12	49.76955
## 2316	58.54	59.20	49.83689
## 2317	58.98	58.92	49.60118
## 2318	58.77	58.75	49.45806
## 2319	60.05	60.48	50.91445
## 2320	60.22	60.46	50.89761
## 2321	59.99	60.24	50.71242
## 2322	60.34	59.94	50.45987
## 2323	59.30	59.48	50.07261
## 2324	59.53	59.40	50.00526
## 2325	59.33	59.03	49.69378
## 2326	59.46	59.71	50.26624
## 2327	59.45	59.22	49.85374
## 2328	59.02	59.87	50.40092
## 2329	59.44	59.20	50.20586
## 2330	58.59	58.36	49.49349
## 2331	58.18	58.81	49.87512
## 2332	58.26	57.32	48.61150
## 2333	57.71	57.74	48.96769
## 2334	57.91	58.20	49.35780
## 2335	58.34	59.28	50.27372
## 2336	60.48	61.79	52.40238
## 2337	61.69	62.59	53.08084
## 2338	62.88	61.87	52.47023
## 2339	61.64	62.27	52.80945
## 2340	62.55	63.32	53.69992
## 2341	63.48	64.24	54.48016
## 2342	64.26	63.60	53.93739
## 2343	63.64	63.97	54.25117
## 2344	63.60	63.60	53.93739
## 2345	63.81	63.93	54.21725
## 2346	63.86	64.11	54.36990
## 2347	63.64	63.60	53.93739
## 2348	63.09	63.20	53.59815
## 2349	63.69	63.79	54.09852
## 2350	62.90	62.56	53.05539
## 2351	61.75	61.57	52.21580
## 2352	61.60	61.24	51.93594
## 2353	60.70	61.60	52.24124
## 2354	61.37	61.21	51.91050
## 2355	61.55	62.04	52.61440
## 2356	61.97	61.81	52.41935
## 2357	62.27	61.77	52.38542
## 2358	61.70	61.20	51.90202
## 2359	61.21	61.66	52.29213
## 2360	61.43	61.66	52.29213

## 2361	61.70	64.04	54.31054
## 2362	63.53	63.39	53.75929
## 2363	63.86	63.51	53.86106
## 2364	63.45	63.46	53.81866
## 2365	63.94	64.54	54.73458
## 2366	64.94	65.52	55.56569
## 2367	65.57	65.03	55.15012
## 2368	65.21	65.43	55.48936
## 2369	65.73	65.27	55.35367
## 2370	64.76	65.69	55.70986
## 2371	65.52	65.81	55.81162
## 2372	64.25	64.64	54.81937
## 2373	64.64	65.28	55.36215
## 2374	65.45	65.06	55.17557
## 2375	64.93	65.25	55.33672
## 2376	64.79	64.75	54.91267
## 2377	63.93	63.84	54.14093
## 2378	63.48	63.27	53.65753
## 2379	62.68	62.08	52.64832
## 2380	62.41	61.97	52.55504
## 2381	61.45	62.22	52.76704
## 2382	62.30	62.28	52.81793
## 2383	63.45	62.37	52.89427
## 2384	62.73	62.95	53.38614
## 2385	62.95	62.71	53.18260
## 2386	63.70	64.05	54.31902
## 2387	60.48	59.60	50.54510
## 2388	58.71	57.61	48.85744
## 2389	59.19	59.52	50.47726
## 2390	60.36	61.20	51.90202
## 2391	61.63	62.14	52.69921
## 2392	61.66	61.26	52.35733
## 2393	60.45	59.55	50.89585
## 2394	59.01	60.19	51.44283
## 2395	60.52	60.58	51.77615
## 2396	61.33	61.83	52.84450
## 2397	62.42	62.27	53.22055
## 2398	63.03	63.20	54.01540
## 2399	63.08	63.16	53.98121
## 2400	64.74	64.12	54.80170
## 2401	64.75	64.18	54.85298
## 2402	64.13	63.96	54.66495
## 2403	63.61	63.86	54.57948
## 2404	64.11	63.93	54.63931
## 2405	64.00	63.69	54.43418
## 2406	63.90	64.04	54.73332
## 2407	63.98	63.87	54.58803
## 2408	63.98	64.13	54.81025
## 2409	64.08	64.33	54.98118
## 2410	64.00	64.10	54.78460
## 2411	63.80	63.97	54.67350
## 2412	64.15	63.80	54.52820
## 2413	63.59	63.65	54.40001
## 2414	63.69	64.66	55.26322

## 2415	64.49	64.56	55.17775
## 2416	65.14	66.30	56.66489
## 2417	66.07	66.10	56.49396
## 2418	66.18	65.87	56.29739
## 2419	65.92	65.28	55.79312
## 2420	65.27	65.46	55.94696
## 2421	64.97	65.32	55.82730
## 2422	65.56	65.72	56.16918
## 2423	65.36	65.71	56.16063
## 2424	65.80	65.89	56.31447
## 2425	65.62	65.95	56.36575
## 2426	65.72	65.86	56.28882
## 2427	65.75	65.80	56.23755
## 2428	66.07	65.77	56.21191
## 2429	65.99	65.95	56.36575
## 2430	65.91	66.07	56.46831
## 2431	66.33	66.22	56.59652
## 2432	66.49	66.95	57.22042
## 2433	66.95	67.50	57.69049
## 2434	67.46	67.50	57.69049
## 2435	67.64	67.21	57.44263
## 2436	67.40	67.49	57.68194
## 2437	67.50	67.44	57.63922
## 2438	67.16	67.16	57.39991
## 2439	67.22	67.25	57.47682
## 2440	67.03	66.65	56.96403
## 2441	66.14	67.06	57.31444
## 2442	66.11	66.53	56.86146
## 2443	66.27	66.40	56.75036
## 2444	66.29	66.64	56.95548
## 2445	66.09	65.82	56.25465
## 2446	66.15	66.19	56.57088
## 2447	66.75	66.46	56.80162
## 2448	66.84	66.84	57.12641
## 2449	66.99	67.39	57.59649
## 2450	67.39	67.25	57.47682
## 2451	66.60	65.78	56.22045
## 2452	65.41	66.36	56.71617
## 2453	66.58	66.71	57.01530
## 2454	66.70	65.65	56.10935
## 2455	66.08	66.59	56.91275
## 2456	66.35	66.51	56.84438
## 2457	66.21	66.60	57.33508
## 2458	66.89	67.69	58.27344
## 2459	67.73	67.87	58.42841
## 2460	67.79	68.11	58.63501
## 2461	68.34	68.64	59.09128
## 2462	68.50	68.31	58.80719
## 2463	68.26	68.13	58.65223
## 2464	67.46	67.74	58.31648
## 2465	68.80	67.52	58.12708
## 2466	67.42	67.17	57.82578
## 2467	67.85	67.70	58.28205
## 2468	67.81	68.35	58.84161

## 2469	68.08	68.26	58.76415
## 2470	67.81	68.49	58.96215
## 2471	68.97	68.87	59.28930
## 2472	68.88	68.80	59.22902
## 2473	68.37	69.13	59.51311
## 2474	69.49	69.23	59.59921
## 2475	69.53	69.11	59.49591
## 2476	69.43	69.26	59.62504
## 2477	69.48	68.97	59.37538
## 2478	68.65	68.68	59.12571
## 2479	68.86	68.38	58.86745
## 2480	68.49	67.76	58.33371
## 2481	69.08	69.88	60.15879
## 2482	69.70	70.03	60.28793
## 2483	71.46	73.25	63.06000
## 2484	74.22	76.65	65.98700
## 2485	76.30	76.69	66.02142
## 2486	77.25	79.51	68.44913
## 2487	78.37	79.36	68.31998
## 2488	78.22	77.40	66.63264
## 2489	77.93	78.02	67.16640
## 2490	77.96	77.71	66.89953
## 2491	78.00	78.05	67.19223
## 2492	78.35	78.53	67.60546
## 2493	78.87	78.86	67.88954
## 2494	79.10	78.83	67.86372
## 2495	78.18	78.32	67.42468
## 2496	78.39	78.92	67.94120
## 2497	79.92	80.17	69.01731
## 2498	80.65	81.79	70.41193
## 2499	81.80	81.60	70.24840
## 2500	82.30	83.26	71.67745
## 2501	83.60	83.69	72.04764
## 2502	83.55	84.07	72.37476
## 2503	84.23	85.12	73.27869
## 2504	85.02	85.49	73.59723
## 2505	85.36	84.73	72.94295
## 2506	84.98	84.76	72.96879
## 2507	83.88	84.73	72.94295
## 2508	85.40	86.00	74.03628
## 2509	86.29	84.94	73.12375
## 2510	84.80	85.43	73.54556
## 2511	85.79	86.53	74.49255
## 2512	86.43	86.75	74.68194
## 2513	86.44	86.89	74.80247
## 2514	87.00	87.05	74.94022
## 2515	87.05	87.13	75.00909
## 2516	87.16	86.50	74.46672
## 2517	86.58	85.89	73.94157
## 2518	86.10	86.29	74.28593
## 2519	87.34	87.23	75.09517
## 2520	86.96	86.91	75.23367
## 2521	86.81	86.11	74.54117
## 2522	86.39	86.12	74.54981

## 2523	85.73	86.18	74.60175
## 2524	86.07	86.43	74.81818
## 2525	86.43	87.08	75.38084
## 2526	86.76	86.24	74.65367
## 2527	87.11	86.70	75.05190
## 2528	84.93	83.55	72.32510
## 2529	83.63	83.94	72.66270
## 2530	84.06	83.30	72.10868
## 2531	83.43	83.67	72.42897
## 2532	83.30	83.71	72.46361
## 2533	83.92	84.72	73.33790
## 2534	85.84	86.03	74.47191
## 2535	85.95	86.75	75.09517
## 2536	86.66	86.93	75.25098
## 2537	86.19	86.03	74.47191
## 2538	85.60	84.63	73.26000
## 2539	85.54	84.95	73.53700
## 2540	84.34	84.59	73.22539
## 2541	86.19	87.18	75.46740
## 2542	86.79	86.77	75.11248
## 2543	87.14	86.72	75.06921
## 2544	86.18	85.96	74.41132
## 2545	85.96	87.20	75.48473
## 2546	87.48	87.00	75.31158
## 2547	87.44	88.15	76.30708
## 2548	88.30	89.56	77.52764
## 2549	90.08	90.59	78.41927
## 2550	90.40	90.53	78.36733
## 2551	89.82	90.23	78.10764
## 2552	90.51	91.01	78.78282
## 2553	90.52	91.06	78.82612
## 2554	91.18	91.13	78.88672
## 2555	90.18	90.33	78.19420
## 2556	90.32	90.43	78.28077
## 2557	89.85	90.62	78.44524
## 2558	92.79	93.60	81.02486
## 2559	93.87	92.14	79.76103
## 2560	92.14	92.80	80.33237
## 2561	92.25	91.92	79.57057
## 2562	91.64	91.41	79.12910
## 2563	92.68	91.21	78.95598
## 2564	91.60	91.57	79.26760
## 2565	91.95	91.28	79.01658
## 2566	91.31	91.36	79.08581
## 2567	91.02	91.51	79.21566
## 2568	91.80	91.73	79.40611
## 2569	92.03	91.64	79.32820
## 2570	91.83	90.68	78.49718
## 2571	90.27	90.03	77.93449
## 2572	90.36	87.39	75.64919
## 2573	86.89	87.53	75.77039
## 2574	87.21	87.39	75.64919
## 2575	87.79	87.29	75.56263
## 2576	85.53	87.24	75.51934

## 2577	87.02	88.60	76.69662
## 2578	88.60	88.27	76.41096
## 2579	88.20	89.03	77.06886
## 2580	88.71	87.84	76.03873
## 2581	87.99	87.52	75.76172
## 2582	86.89	87.31	76.01420
## 2583	88.42	86.19	75.03910
## 2584	85.98	86.48	75.29160
## 2585	85.93	86.18	75.03039
## 2586	86.08	85.88	74.76921
## 2587	85.54	85.73	74.63863
## 2588	85.93	85.40	74.35132
## 2589	85.50	84.40	73.48069
## 2590	84.44	85.86	74.75180
## 2591	85.36	85.16	74.14236
## 2592	85.50	84.46	73.53294
## 2593	84.98	85.55	74.48191
## 2594	85.50	84.52	73.58516
## 2595	86.55	87.50	76.17966
## 2596	88.55	88.26	76.84131
## 2597	88.35	88.43	76.98930
## 2598	88.37	87.61	76.27538
## 2599	87.60	87.00	75.74431
## 2600	87.36	87.06	75.79653
## 2601	86.71	86.50	75.30901
## 2602	86.06	87.00	75.74431
## 2603	87.69	87.10	75.83137
## 2604	87.25	87.00	75.74431
## 2605	87.04	87.10	75.83137
## 2606	87.26	86.75	75.52666
## 2607	86.53	87.43	76.11867
## 2608	87.09	87.16	75.88363
## 2609	86.68	86.92	75.67466
## 2610	87.10	87.34	76.04032
## 2611	87.36	87.61	76.27538
## 2612	87.61	84.27	73.36750
## 2613	84.07	83.96	73.09761
## 2614	84.21	84.78	73.81152
## 2615	85.18	84.70	73.74187
## 2616	84.75	85.76	74.66475
## 2617	85.88	85.71	74.62122
## 2618	85.99	85.35	74.30778
## 2619	85.11	85.36	74.31648
## 2620	85.13	83.90	73.04538
## 2621	83.73	82.15	71.52179
## 2622	82.46	83.06	72.31406
## 2623	82.29	82.64	71.94840
## 2624	82.64	82.79	72.07897
## 2625	82.29	82.96	72.22698
## 2626	83.31	83.91	73.05409
## 2627	83.91	84.95	73.95955
## 2628	85.51	86.96	75.70946
## 2629	86.96	86.98	75.72690
## 2630	87.55	87.27	75.97938

## 2631	86.77	87.09	75.82265
## 2632	86.25	86.57	75.36993
## 2633	86.85	86.18	75.03039
## 2634	86.97	88.07	76.67589
## 2635	87.75	87.52	76.19703
## 2636	87.48	87.12	75.84879
## 2637	86.93	87.02	75.76172
## 2638	87.66	86.86	75.62243
## 2639	87.01	87.24	75.95326
## 2640	87.71	88.05	76.65847
## 2641	88.60	89.82	78.19948
## 2642	92.34	91.15	79.35740
## 2643	91.96	91.40	79.57506
## 2644	91.56	92.75	81.19457
## 2645	93.12	93.68	82.00871
## 2646	93.54	93.38	81.74608
## 2647	93.96	93.85	82.15754
## 2648	93.50	93.19	81.57975
## 2649	93.33	92.83	81.26459
## 2650	92.61	92.51	80.98448
## 2651	92.69	93.10	81.50098
## 2652	90.81	92.25	80.75687
## 2653	91.82	91.39	80.00403
## 2654	90.45	91.07	79.72387
## 2655	91.34	91.20	79.83769
## 2656	91.15	91.20	79.83769
## 2657	91.06	90.89	79.56632
## 2658	90.96	91.28	79.90771
## 2659	92.37	92.80	81.23835
## 2660	93.10	91.93	80.47672
## 2661	91.83	91.55	80.14409
## 2662	91.45	91.28	79.90771
## 2663	91.51	91.80	80.36295
## 2664	92.49	93.03	81.43967
## 2665	92.87	93.11	81.50972
## 2666	92.70	92.50	80.97572
## 2667	93.50	93.66	81.99120
## 2668	93.89	94.02	82.30635
## 2669	93.95	93.68	82.00871
## 2670	92.98	93.53	81.87738
## 2671	92.90	92.19	80.70434
## 2672	92.13	91.42	80.03027
## 2673	92.37	92.49	80.96695
## 2674	93.31	92.73	81.17709
## 2675	93.04	92.09	80.61680
## 2676	91.76	90.65	79.35620
## 2677	90.31	90.74	79.43499
## 2678	90.85	90.63	79.33868
## 2679	91.07	91.56	80.15282
## 2680	90.87	91.67	80.24912
## 2681	91.93	91.52	80.11782
## 2682	91.88	91.89	80.44172
## 2683	92.16	91.60	80.18784
## 2684	90.45	91.10	79.75014

## 2685	91.25	91.31	79.93399
## 2686	91.81	90.89	79.56632
## 2687	91.25	91.70	80.27540
## 2688	91.02	89.51	78.35823
## 2689	90.00	90.11	78.88350
## 2690	90.11	88.53	77.50033
## 2691	88.31	88.42	77.40403
## 2692	89.39	89.79	78.60335
## 2693	90.17	90.89	79.56632
## 2694	90.61	91.15	79.79391
## 2695	91.20	90.97	79.63635
## 2696	91.08	91.62	80.20536
## 2697	91.93	92.92	81.34341
## 2698	92.71	93.94	82.23631
## 2699	94.10	94.60	82.81409
## 2700	94.46	95.03	83.19051
## 2701	94.70	94.83	83.01543
## 2702	94.51	94.12	82.39389
## 2703	93.78	93.70	82.02620
## 2704	94.97	95.18	83.32183
## 2705	95.59	95.38	83.49692
## 2706	95.30	95.51	83.61072
## 2707	95.77	96.84	84.77501
## 2708	96.83	97.35	85.22147
## 2709	97.30	96.36	84.35483
## 2710	96.00	97.09	85.49068
## 2711	97.55	96.92	85.34100
## 2712	96.96	96.41	84.89194
## 2713	96.46	97.13	85.52592
## 2714	96.83	96.84	85.27055
## 2715	97.30	95.99	84.52211
## 2716	95.48	95.86	84.40764
## 2717	96.34	97.84	86.15111
## 2718	98.07	97.62	85.95737
## 2719	98.15	97.99	86.28318
## 2720	97.19	98.11	86.38884
## 2721	99.28	99.51	87.62158
## 2722	99.51	99.34	87.47189
## 2723	99.88	100.92	88.86314
## 2724	101.25	101.02	88.95116
## 2725	101.35	101.74	89.58516
## 2726	101.43	101.77	89.61156
## 2727	101.13	101.41	89.29459
## 2728	101.37	100.61	88.59017
## 2729	101.10	100.92	88.86314
## 2730	100.87	101.59	89.45306
## 2731	101.10	101.41	89.29459
## 2732	101.34	100.78	88.73985
## 2733	100.56	98.75	86.95239
## 2734	98.27	97.64	85.97498
## 2735	97.12	97.63	85.96619
## 2736	97.81	97.51	85.86052
## 2737	96.69	97.86	86.16871
## 2738	97.34	97.27	85.64919

## 2739	96.39	98.19	86.45928
## 2740	98.53	98.47	86.70583
## 2741	97.82	98.14	86.41523
## 2742	98.45	99.01	87.18130
## 2743	99.50	98.93	87.11086
## 2744	99.03	98.64	86.85551
## 2745	98.83	98.32	86.57375
## 2746	98.31	97.93	86.23035
## 2747	98.21	101.36	89.25056
## 2748	102.41	103.73	91.33742
## 2749	104.74	104.52	92.03304
## 2750	104.90	104.79	92.27078
## 2751	107.73	106.95	94.17272
## 2752	105.58	105.72	93.08969
## 2753	105.55	104.93	92.39405
## 2754	103.95	104.62	92.12109
## 2755	104.75	105.93	93.27457
## 2756	105.72	105.62	93.00163
## 2757	106.91	106.85	94.08467
## 2758	106.70	105.51	92.90476
## 2759	106.12	104.66	92.15632
## 2760	105.79	106.14	93.45948
## 2761	107.19	106.96	94.18154
## 2762	107.35	106.51	93.78529
## 2763	107.60	106.14	93.45948
## 2764	106.59	107.83	94.94759
## 2765	108.20	107.45	94.61298
## 2766	107.20	107.02	94.23437
## 2767	106.67	107.22	94.41047
## 2768	107.40	107.79	94.91238
## 2769	108.09	106.94	94.16392
## 2770	107.63	107.95	95.05324
## 2771	107.86	108.06	95.15012
## 2772	108.36	109.04	96.51321
## 2773	109.26	108.34	95.89360
## 2774	108.15	108.50	96.03523
## 2775	108.72	109.05	96.52205
## 2776	109.47	110.25	97.58419
## 2777	110.67	110.84	98.10640
## 2778	111.65	112.67	99.72617
## 2779	111.51	112.27	99.37212
## 2780	111.89	112.99	100.00941
## 2781	112.76	113.26	100.24841
## 2782	113.94	113.01	100.02713
## 2783	112.66	114.33	101.19548
## 2784	113.67	114.21	101.08925
## 2785	114.86	115.67	102.38152
## 2786	116.04	115.70	102.40807
## 2787	115.70	116.32	102.95685
## 2788	116.02	116.20	102.85065
## 2789	115.53	115.11	101.88587
## 2790	115.65	115.67	102.38152
## 2791	115.77	116.87	103.44366
## 2792	116.49	114.28	101.15121

## 2793	113.00	108.80	96.30078
## 2794	106.85	112.11	99.23051
## 2795	111.55	112.87	99.90320
## 2796	113.11	107.88	95.48646
## 2797	109.10	110.04	97.39831
## 2798	111.17	111.74	98.90301
## 2799	111.32	112.43	99.51373
## 2800	112.63	115.03	101.81506
## 2801	115.74	115.51	102.23991
## 2802	114.55	114.68	101.50526
## 2803	114.65	114.71	101.53181
## 2804	115.00	115.19	101.95667
## 2805	115.50	114.98	101.77080
## 2806	115.31	117.31	103.83312
## 2807	118.14	118.77	105.12537
## 2808	118.91	117.36	103.87738
## 2809	117.82	115.50	102.23106
## 2810	115.48	113.43	100.39887
## 2811	112.39	113.32	100.30149
## 2812	112.05	115.06	101.84161
## 2813	115.64	115.16	101.93012
## 2814	113.75	114.73	101.54952
## 2815	115.11	114.74	101.55837
## 2816	116.55	118.04	104.47926
## 2817	118.00	117.66	104.14291
## 2818	118.20	116.25	102.89490
## 2819	116.56	114.95	101.74425
## 2820	115.87	115.24	102.00093
## 2821	115.34	115.44	102.17796
## 2822	115.10	114.53	101.37248
## 2823	114.87	114.64	101.46986
## 2824	114.81	114.74	101.55837
## 2825	113.20	109.95	97.31866
## 2826	110.27	107.01	94.71640
## 2827	109.19	110.31	97.63729
## 2828	111.07	108.17	95.74314
## 2829	108.28	108.00	95.59267
## 2830	108.50	109.97	97.33636
## 2831	109.96	107.85	95.45991
## 2832	108.36	109.33	96.76989
## 2833	107.10	110.99	98.23917
## 2834	111.63	111.88	99.52909
## 2835	110.55	109.09	97.04710
## 2836	110.01	110.40	98.21249
## 2837	112.13	112.51	100.08957
## 2838	111.66	110.62	98.40820
## 2839	111.56	113.37	100.85462
## 2840	115.02	110.30	98.12352
## 2841	110.94	110.21	98.04346
## 2842	111.37	110.21	98.04346
## 2843	110.53	109.32	97.25170
## 2844	109.53	111.72	99.38679
## 2845	112.30	111.47	99.16436
## 2846	111.57	110.93	98.68397

## 2847	111.75	110.41	98.22139
## 2848	110.27	109.99	97.84774
## 2849	109.97	110.10	97.94559
## 2850	109.55	109.40	97.32288
## 2851	109.75	108.78	96.77132
## 2852	108.45	108.78	96.77132
## 2853	108.11	107.92	96.00626
## 2854	107.59	107.24	95.40132
## 2855	106.43	108.43	96.45996
## 2856	108.76	109.37	97.29620
## 2857	109.53	110.99	98.73737
## 2858	111.44	113.41	100.89019
## 2859	113.19	114.29	101.67305
## 2860	114.49	113.86	101.29053
## 2861	114.11	113.90	101.32610
## 2862	113.91	113.03	100.55213
## 2863	112.89	113.34	100.82792
## 2864	113.20	112.96	100.48988
## 2865	112.75	111.13	98.86191
## 2866	112.05	112.15	99.76930
## 2867	112.35	113.01	100.53436
## 2868	112.51	112.49	100.07177
## 2869	112.14	111.23	98.95086
## 2870	110.46	110.66	98.44379
## 2871	109.18	105.93	94.23595
## 2872	107.64	108.35	96.38879
## 2873	107.95	107.01	95.19672
## 2874	108.34	108.40	96.43328
## 2875	108.99	108.45	96.47775
## 2876	108.24	107.84	95.93509
## 2877	108.66	110.36	98.17690
## 2878	111.18	110.80	98.56834
## 2879	110.62	111.11	98.84410
## 2880	111.12	110.83	98.59501
## 2881	111.14	110.19	98.02568
## 2882	110.46	109.97	97.82996
## 2883	110.28	108.03	96.10412
## 2884	107.80	107.90	95.98847
## 2885	107.26	108.18	96.23756
## 2886	106.90	107.55	95.67711
## 2887	108.18	107.54	95.66821
## 2888	107.10	107.51	95.64152
## 2889	108.16	105.75	94.07584
## 2890	105.66	104.79	93.22179
## 2891	104.71	104.86	93.28406
## 2892	104.68	103.24	91.84292
## 2893	103.68	104.93	93.34634
## 2894	106.68	104.20	92.69693
## 2895	103.72	105.08	93.47979
## 2896	105.41	103.61	92.17207
## 2897	104.13	103.72	92.77135
## 2898	103.12	104.06	93.07546
## 2899	104.71	107.28	95.95554
## 2900	108.02	106.62	95.36522

## 2901	106.31	106.39	95.15950
## 2902	107.42	106.85	95.57094
## 2903	107.30	106.36	95.13265
## 2904	107.05	110.58	98.90719
## 2905	110.69	110.50	98.83566
## 2906	110.42	111.53	99.75691
## 2907	111.06	109.89	98.29005
## 2908	110.00	111.28	99.53331
## 2909	111.06	113.35	101.38480
## 2910	113.55	114.15	102.10034
## 2911	113.88	115.18	103.02162
## 2912	115.42	114.85	102.72646
## 2913	115.18	116.03	103.78190
## 2914	116.28	116.73	104.40799
## 2915	117.08	114.95	102.81589
## 2916	115.75	115.66	103.45097
## 2917	114.57	116.15	103.88922
## 2918	116.00	117.09	104.73000
## 2919	116.79	117.12	104.75682
## 2920	117.74	117.55	105.14146
## 2921	117.33	117.79	105.35612
## 2922	117.51	116.88	104.54218
## 2923	115.50	115.73	103.51357
## 2924	115.56	113.89	101.86779
## 2925	114.27	114.65	102.54757
## 2926	113.82	113.70	101.69784
## 2927	114.35	114.77	102.65490
## 2928	114.64	114.77	102.65490
## 2929	114.59	114.62	102.52074
## 2930	115.37	115.32	103.14684
## 2931	115.31	114.97	102.83378
## 2932	114.96	114.73	102.61912
## 2933	114.98	114.68	102.57441
## 2934	115.22	116.71	104.39011
## 2935	117.00	116.14	103.88029
## 2936	116.35	115.76	103.54038
## 2937	115.59	115.19	103.03056
## 2938	114.83	114.58	102.48496
## 2939	114.34	115.15	102.99477
## 2940	115.00	114.59	102.49390
## 2941	114.50	114.10	102.05562
## 2942	114.50	114.32	102.25240
## 2943	114.85	113.71	101.70680
## 2944	113.54	114.43	102.35080
## 2945	114.25	113.08	101.14329
## 2946	113.37	113.52	101.53684
## 2947	113.81	113.50	101.51897
## 2948	113.79	113.84	101.82307
## 2949	114.33	114.30	102.23450
## 2950	114.44	117.62	105.20407
## 2951	118.50	118.63	106.10743
## 2952	119.13	117.85	105.40978
## 2953	117.76	116.72	104.39906
## 2954	117.04	116.39	104.10390

## 2955	116.75	115.02	102.87850
## 2956	115.42	114.52	102.43127
## 2957	113.65	112.84	100.92863
## 2958	113.37	113.50	101.51897
## 2959	113.36	113.97	101.93935
## 2960	114.94	115.04	102.89638
## 2961	114.55	115.27	103.82412
## 2962	115.83	114.62	103.23867
## 2963	114.25	115.32	103.86916
## 2964	114.67	114.52	103.14859
## 2965	114.70	111.47	100.40145
## 2966	110.97	108.13	97.39309
## 2967	110.37	106.95	96.33025
## 2968	107.20	106.34	95.78085
## 2969	107.16	108.62	97.83444
## 2970	108.38	109.83	98.92429
## 2971	109.02	108.09	97.35706
## 2972	107.65	107.91	97.19495
## 2973	108.15	106.36	95.79885
## 2974	104.20	105.25	94.79907
## 2975	104.76	103.29	93.03368
## 2976	104.18	104.86	94.44778
## 2977	104.00	103.42	93.15079
## 2978	104.46	104.85	94.43879
## 2979	105.71	106.70	96.10509
## 2980	108.08	109.02	98.19473
## 2981	109.62	108.98	98.15871
## 2982	109.90	108.38	97.61827
## 2983	108.61	109.09	98.25778
## 2984	108.67	109.60	98.71713
## 2985	110.37	111.48	100.41045
## 2986	111.01	112.38	101.22108
## 2987	112.23	111.29	100.23932
## 2988	111.42	108.95	98.13168
## 2989	109.10	109.59	98.70812
## 2990	110.23	107.33	96.67255
## 2991	108.24	110.07	99.14047
## 2992	109.45	109.99	99.06841
## 2993	109.96	110.83	99.82500
## 2994	109.78	108.45	97.68134
## 2995	109.03	107.64	96.95174
## 2996	106.74	106.65	96.06005
## 2997	107.72	109.26	98.41090
## 2998	108.76	109.72	98.82521
## 2999	109.80	110.94	99.92407
## 3000	110.27	110.06	99.13145
## 3001	109.85	111.19	100.14925
## 3002	112.38	112.24	101.09497
## 3003	111.60	107.23	96.58247
## 3004	105.01	105.19	94.74504
## 3005	105.16	103.29	93.03368
## 3006	102.87	101.36	91.29534
## 3007	103.13	100.37	90.40363
## 3008	101.66	101.02	90.98909

## 3009	101.55	101.12	91.07916
## 3010	99.99	100.29	90.33158
## 3011	99.77	99.01	89.17868
## 3012	99.42	98.54	88.75533
## 3013	98.41	97.29	87.62947
## 3014	96.61	96.45	86.87289
## 3015	96.68	94.17	84.81928
## 3016	92.89	92.14	82.99084
## 3017	92.69	95.96	86.43153
## 3018	94.82	97.04	87.40430
## 3019	97.95	96.83	87.21515
## 3020	97.59	97.62	87.92670
## 3021	95.95	99.31	89.44888
## 3022	98.64	97.11	88.17766
## 3023	99.11	100.69	91.42838
## 3024	100.43	100.76	91.49194
## 3025	101.63	100.57	91.31939
## 3026	100.81	100.40	91.16502
## 3027	100.02	100.39	91.15596
## 3028	99.89	99.91	90.72012
## 3029	98.87	100.94	91.65537
## 3030	98.89	101.68	92.32730
## 3031	102.25	102.50	93.07189
## 3032	102.11	102.92	93.45325
## 3033	103.77	104.59	94.96964
## 3034	103.08	102.94	93.47140
## 3035	103.44	102.68	93.23534
## 3036	102.13	102.74	93.28979
## 3037	103.51	103.39	93.88002
## 3038	102.89	103.88	94.32495
## 3039	103.88	104.17	94.58828
## 3040	104.14	104.41	94.80619
## 3041	103.41	103.50	93.97990
## 3042	104.00	103.88	94.32495
## 3043	103.79	104.25	94.66092
## 3044	104.52	103.79	94.24323
## 3045	103.71	103.74	94.19782
## 3046	103.25	102.38	92.96291
## 3047	102.08	101.36	92.03675
## 3048	101.76	100.88	91.60089
## 3049	101.95	102.60	93.16269
## 3050	102.90	103.09	93.60761
## 3051	102.47	102.42	92.99924
## 3052	103.90	105.55	95.84134
## 3053	104.91	105.18	95.50538
## 3054	105.21	105.69	95.96845
## 3055	105.45	105.47	95.76868
## 3056	105.70	105.00	95.34193
## 3057	105.75	106.10	96.34074
## 3058	104.50	105.29	95.60525
## 3059	105.18	105.16	95.48721
## 3060	105.01	104.36	94.76080
## 3061	105.10	104.43	94.82436
## 3062	104.92	104.19	94.60644

## 3063	104.13	104.11	94.53379
## 3064	103.86	103.72	94.17967
## 3065	103.25	102.97	93.49865
## 3066	101.99	103.01	93.53497
## 3067	103.98	104.35	94.75171
## 3068	104.59	104.04	94.47022
## 3069	104.19	104.39	94.78803
## 3070	104.50	105.34	95.65066
## 3071	105.41	106.55	96.74936
## 3072	106.55	107.19	97.33049
## 3073	108.20	106.80	96.97636
## 3074	106.43	104.52	94.90608
## 3075	103.49	102.87	93.40786
## 3076	101.82	99.76	90.58392
## 3077	99.59	98.93	89.83025
## 3078	99.82	99.92	90.72920
## 3079	99.88	99.58	90.42047
## 3080	100.00	100.71	91.44653
## 3081	101.54	101.23	91.91871
## 3082	102.15	104.64	95.01505
## 3083	104.60	105.14	95.46905
## 3084	105.81	105.35	95.65973
## 3085	104.55	105.56	96.58384
## 3086	105.80	105.31	96.35511
## 3087	105.11	105.65	96.66619
## 3088	105.08	104.87	95.95253
## 3089	105.13	105.34	96.38257
## 3090	105.71	106.23	97.19689
## 3091	109.44	111.21	101.75342
## 3092	110.92	109.94	100.59141
## 3093	109.90	111.10	101.65276
## 3094	111.70	114.30	104.58067
## 3095	114.53	113.46	103.81208
## 3096	112.83	113.60	103.94017
## 3097	113.00	113.74	104.06827
## 3098	113.26	113.55	103.89443
## 3099	113.01	113.61	103.94934
## 3100	113.95	114.47	104.73620
## 3101	114.60	116.12	106.24589
## 3102	116.43	116.05	106.18185
## 3103	115.72	115.16	105.36752
## 3104	115.17	115.41	105.59626
## 3105	116.00	116.12	106.24589
## 3106	114.18	115.09	105.30347
## 3107	114.03	113.21	103.58335
## 3108	112.66	112.61	103.03438
## 3109	111.14	112.52	102.95203
## 3110	111.75	112.51	102.94288
## 3111	110.08	109.45	100.14307
## 3112	109.55	110.32	100.93910
## 3113	109.21	109.90	100.55480
## 3114	110.62	111.31	101.84490
## 3115	110.00	110.77	101.35083
## 3116	110.58	111.35	101.88151

## 3117	111.44	111.73	102.22919
## 3118	111.40	110.82	101.39658
## 3119	109.64	108.64	99.40195
## 3120	109.52	109.71	100.38097
## 3121	109.20	108.52	99.29214
## 3122	107.45	108.22	99.01766
## 3123	108.65	107.06	97.95630
## 3124	105.56	105.96	96.94984
## 3125	105.80	106.46	97.40733
## 3126	107.85	109.74	100.40841
## 3127	109.86	110.13	100.76524
## 3128	110.15	110.37	100.98485
## 3129	109.70	109.16	99.87774
## 3130	110.75	110.34	100.95739
## 3131	110.82	110.68	101.26847
## 3132	110.70	109.27	99.97839
## 3133	109.46	109.54	100.22541
## 3134	109.57	109.82	100.48161
## 3135	109.70	109.22	99.93262
## 3136	109.01	110.71	101.29591
## 3137	110.82	109.91	100.56396
## 3138	110.88	110.19	100.82014
## 3139	110.19	109.44	100.13393
## 3140	109.28	108.66	99.42025
## 3141	108.68	107.76	98.59678
## 3142	108.30	108.48	99.25555
## 3143	108.84	108.84	99.58494
## 3144	111.04	111.80	102.29324
## 3145	113.23	113.68	104.01338
## 3146	113.51	113.80	104.12318
## 3147	113.34	112.82	103.95731
## 3148	113.51	113.49	104.57467
## 3149	112.96	112.87	104.00339
## 3150	112.28	113.35	104.44568
## 3151	113.37	113.02	104.14160
## 3152	113.37	114.10	105.13676
## 3153	114.13	115.30	106.24250
## 3154	115.54	113.90	104.95248
## 3155	113.48	115.12	106.07664
## 3156	114.43	113.99	105.03541
## 3157	113.93	114.67	105.66200
## 3158	114.89	113.54	104.62076
## 3159	112.91	114.27	105.29340
## 3160	114.88	116.36	107.21924
## 3161	115.58	116.83	107.65231
## 3162	116.89	115.71	106.62028
## 3163	115.77	116.22	107.09023
## 3164	116.46	115.85	106.74930
## 3165	115.19	115.59	106.50970
## 3166	116.10	116.00	106.88751
## 3167	115.33	112.94	104.06789
## 3168	112.40	112.93	104.05868
## 3169	110.79	109.57	100.96262
## 3170	110.05	110.43	101.75507

## 3171	108.00	108.03	99.54359
## 3172	109.05	109.86	101.22984
## 3173	109.35	109.74	101.11926
## 3174	108.44	107.68	99.22109
## 3175	107.95	109.34	100.75069
## 3176	106.30	104.80	96.56734
## 3177	104.82	105.20	96.93592
## 3178	106.37	107.72	99.25796
## 3179	109.63	108.69	100.15175
## 3180	107.85	107.31	98.88016
## 3181	108.21	107.61	99.15659
## 3182	108.37	108.72	100.17939
## 3183	108.00	106.02	97.69151
## 3184	106.62	106.87	98.47473
## 3185	107.35	105.74	97.43348
## 3186	105.08	106.80	98.41022
## 3187	108.14	109.22	100.64011
## 3188	109.84	109.86	101.22984
## 3189	108.98	108.56	100.03196
## 3190	109.45	109.87	101.23906
## 3191	111.25	112.37	103.54266
## 3192	112.66	112.61	103.76382
## 3193	113.71	115.40	106.33466
## 3194	116.30	116.87	107.68916
## 3195	116.89	117.19	107.98403
## 3196	116.55	117.91	108.64748
## 3197	119.00	120.23	110.78522
## 3198	118.90	119.16	109.79928
## 3199	118.42	118.57	109.25562
## 3200	118.32	119.76	110.35213
## 3201	119.70	119.38	110.00199
## 3202	119.74	118.90	109.55970
## 3203	117.78	118.88	109.54127
## 3204	118.75	117.33	108.11302
## 3205	117.27	118.00	108.73040
## 3206	117.88	117.03	107.83660
## 3207	117.96	117.72	108.47238
## 3208	118.36	117.69	108.44476
## 3209	118.40	115.55	106.47286
## 3210	114.81	113.25	104.35354
## 3211	112.27	112.19	104.20493
## 3212	112.34	114.62	106.46197
## 3213	114.19	114.37	106.22977
## 3214	113.06	111.82	103.86125
## 3215	112.67	112.63	104.61362
## 3216	113.14	114.21	106.08115
## 3217	116.03	116.14	107.87378
## 3218	115.85	116.45	108.16173
## 3219	118.85	119.96	111.42190
## 3220	119.96	119.68	111.16183
## 3221	120.75	120.35	111.78415
## 3222	120.00	120.56	111.97920
## 3223	122.05	123.55	114.75638
## 3224	123.45	124.79	115.90813

## 3225	124.20	125.12	116.21464
## 3226	125.29	125.03	116.13103
## 3227	125.00	126.03	117.05988
## 3228	126.57	126.51	117.50571
## 3229	126.06	126.43	117.43139
## 3230	126.05	125.73	116.78121
## 3231	125.49	124.92	116.02886
## 3232	126.20	127.80	118.70389
## 3233	129.08	128.82	119.65130
## 3234	129.39	129.10	119.91137
## 3235	128.69	129.30	120.09714
## 3236	130.43	130.00	120.74731
## 3237	129.88	130.38	121.10028
## 3238	129.60	129.92	120.67301
## 3239	129.63	129.16	119.96709
## 3240	128.13	128.48	119.33549
## 3241	127.72	128.60	119.44696
## 3242	129.23	129.53	120.31074
## 3243	129.56	130.62	121.32318
## 3244	130.99	130.58	121.28603
## 3245	130.30	129.63	120.40366
## 3246	130.00	129.93	120.68227
## 3247	130.15	130.79	121.48106
## 3248	131.25	131.49	122.13126
## 3249	131.82	131.67	122.29845
## 3250	132.29	132.06	122.66068
## 3251	131.87	131.76	122.38206
## 3252	132.31	131.47	122.11266
## 3253	129.77	129.78	120.54298
## 3254	130.38	132.34	122.92076
## 3255	132.68	133.06	123.58951
## 3256	134.69	135.04	125.42861
## 3257	134.63	134.41	124.84343
## 3258	133.25	134.50	124.92702
## 3259	134.29	134.18	124.62980
## 3260	134.49	138.02	128.19650
## 3261	137.95	136.81	127.07261
## 3262	138.38	137.34	127.56489
## 3263	137.73	138.18	128.34509
## 3264	138.15	138.04	128.21504
## 3265	137.76	137.35	127.57418
## 3266	138.02	137.24	127.47202
## 3267	137.60	137.20	127.43485
## 3268	137.33	137.58	127.78780
## 3269	137.89	139.04	129.14386
## 3270	139.30	139.14	129.23677
## 3271	139.90	138.63	128.76306
## 3272	138.51	139.40	129.47827
## 3273	139.79	141.09	131.04799
## 3274	137.50	138.34	129.31862
## 3275	136.56	138.23	129.21579
## 3276	137.28	135.88	127.01904
## 3277	135.70	136.94	128.00992
## 3278	138.05	137.44	128.47733

## 3279	137.21	136.07	127.19668
## 3280	136.19	137.20	128.25296
## 3281	137.94	138.80	129.74863
## 3282	137.85	136.72	127.80428
## 3283	137.45	137.25	128.29970
## 3284	137.54	138.20	129.18776
## 3285	137.19	136.84	127.91644
## 3286	137.24	136.68	127.76685
## 3287	135.71	136.54	127.63599
## 3288	136.37	133.15	124.46708
## 3289	130.27	132.03	123.42010
## 3290	132.84	134.43	125.66361
## 3291	134.81	134.23	125.47664
## 3292	132.69	135.89	127.02839
## 3293	134.49	132.36	123.72858
## 3294	132.66	133.37	124.67273
## 3295	135.55	135.29	126.46751
## 3296	136.57	137.59	128.61752
## 3297	138.24	137.61	128.63621
## 3298	136.73	137.17	128.22492
## 3299	136.95	137.74	128.75777
## 3300	138.26	138.00	129.00076
## 3301	138.60	138.00	129.00076
## 3302	137.75	137.88	128.88861
## 3303	137.84	137.46	128.49600
## 3304	137.34	135.64	126.79468
## 3305	136.91	137.49	128.52405
## 3306	137.17	137.49	128.52405
## 3307	136.55	135.81	126.95362
## 3308	131.44	132.16	123.54162
## 3309	131.00	126.26	118.02639
## 3310	126.93	126.64	118.38159
## 3311	122.91	121.37	113.45526
## 3312	117.52	116.11	108.53828
## 3313	116.63	121.52	113.59548
## 3314	120.97	116.96	109.33285
## 3315	118.33	119.85	112.03437
## 3316	115.67	113.97	106.53783
## 3317	106.26	108.08	101.03193
## 3318	96.57	93.44	87.34662
## 3319	99.00	100.70	94.13319
## 3320	97.70	95.96	89.70229
## 3321	89.59	88.05	82.30811
## 3322	95.99	103.91	97.13386
## 3323	85.20	88.36	82.59790
## 3324	90.89	93.76	87.64576
## 3325	87.67	83.89	78.41939
## 3326	81.56	85.30	79.73743
## 3327	86.30	83.50	78.05483
## 3328	82.68	79.03	73.87631
## 3329	84.90	88.43	82.66333
## 3330	89.24	91.73	85.74813
## 3331	94.08	98.12	91.72144
## 3332	93.19	91.13	85.18726

## 3333	90.65	93.50	87.40270
## 3334	92.05	90.03	84.15899
## 3335	85.10	84.36	78.85873
## 3336	83.51	87.51	81.80334
## 3337	86.00	84.05	79.38541
## 3338	88.99	89.46	84.49515
## 3339	94.45	90.64	85.60968
## 3340	92.10	94.30	89.06656
## 3341	96.92	102.76	97.05705
## 3342	103.11	98.19	92.74067
## 3343	101.02	95.50	90.19995
## 3344	91.15	90.79	85.75135
## 3345	90.23	87.33	82.48337
## 3346	92.00	95.18	89.89771
## 3347	92.47	91.71	86.62028
## 3348	88.62	89.05	84.10791
## 3349	90.69	89.34	84.38182
## 3350	89.74	89.39	84.42904
## 3351	90.64	90.71	85.67580
## 3352	91.94	94.62	89.36880
## 3353	97.81	95.29	90.00160
## 3354	99.08	97.86	92.42897
## 3355	95.60	95.76	90.44553
## 3356	93.50	93.25	88.07483
## 3357	92.02	92.14	87.02643
## 3358	93.65	92.00	86.89420
## 3359	92.16	90.27	85.26021
## 3360	91.34	91.21	86.14803
## 3361	92.80	92.70	87.55535
## 3362	91.11	89.97	84.97685
## 3363	90.15	87.03	82.20002
## 3364	86.38	84.03	79.36652
## 3365	82.72	87.52	82.66282
## 3366	86.85	85.90	81.13274
## 3367	88.69	90.45	85.43022
## 3368	90.05	88.67	83.74900
## 3369	90.71	91.33	86.26138
## 3370	90.27	90.17	85.16574
## 3371	90.01	89.47	84.50461
## 3372	92.89	95.82	90.50219
## 3373	102.07	101.37	95.74418
## 3374	102.94	99.86	94.31798
## 3375	98.66	97.31	91.90950
## 3376	97.75	98.60	93.12791
## 3377	100.28	98.93	93.43959
## 3378	101.58	104.27	98.48323
## 3379	103.82	106.44	100.53281
## 3380	114.93	111.23	105.05697
## 3381	113.41	113.45	107.15376
## 3382	110.65	110.54	104.40527
## 3383	110.46	106.06	100.17389
## 3384	100.03	97.21	91.81504
## 3385	100.71	99.87	94.32744
## 3386	96.42	101.25	95.63084

## 3387	105.37	102.06	96.39588
## 3388	102.53	99.48	93.95908
## 3389	98.67	98.94	93.44904
## 3390	100.53	97.81	92.38175
## 3391	97.25	96.75	91.38058
## 3392	98.97	97.93	92.49509
## 3393	96.75	94.66	89.40658
## 3394	94.35	97.96	92.52343
## 3395	95.11	92.59	87.45145
## 3396	93.40	93.00	87.83870
## 3397	92.83	94.06	88.83987
## 3398	94.89	93.26	88.08427
## 3399	94.74	92.66	88.37038
## 3400	94.43	95.00	90.60205
## 3401	93.82	92.32	88.04611
## 3402	92.29	93.30	88.98074
## 3403	93.52	91.28	87.05427
## 3404	92.00	96.27	91.81325
## 3405	98.73	97.65	93.12938
## 3406	98.37	98.21	93.66345
## 3407	100.89	99.73	95.11308
## 3408	98.78	100.01	95.38013
## 3409	100.00	98.16	93.61577
## 3410	97.43	97.30	92.79559
## 3411	97.71	99.41	94.80791
## 3412	99.65	98.69	94.12123
## 3413	98.50	98.98	94.39780
## 3414	99.60	98.28	93.73021
## 3415	97.51	96.90	92.41409
## 3416	96.50	97.32	92.81464
## 3417	97.07	99.68	95.06539
## 3418	97.54	97.02	92.52853
## 3419	96.48	96.64	92.16613
## 3420	97.02	96.10	91.65113
## 3421	95.91	95.55	91.12660
## 3422	95.87	97.21	92.70976
## 3423	97.58	97.24	92.73835
## 3424	96.93	99.38	94.77928
## 3425	100.11	100.64	95.98096
## 3426	103.86	103.82	99.01374
## 3427	106.16	102.94	98.17448
## 3428	102.00	102.37	97.63087
## 3429	101.50	102.41	97.66901
## 3430	101.50	99.71	95.09401
## 3431	99.91	98.32	93.76836
## 3432	98.92	98.55	93.98770
## 3433	97.26	97.37	92.86234
## 3434	97.27	97.32	92.81464
## 3435	98.45	100.06	95.42780
## 3436	101.27	100.50	95.84744
## 3437	99.94	99.09	94.50271
## 3438	99.00	102.35	97.61179
## 3439	103.14	102.77	98.01234
## 3440	102.12	100.19	95.55179

## 3441	99.55	100.14	95.50410
## 3442	99.95	101.65	96.94420
## 3443	103.32	101.33	96.63902
## 3444	104.05	103.52	98.72762
## 3445	102.98	99.92	95.29429
## 3446	100.80	100.87	96.20030
## 3447	101.40	99.83	95.20845
## 3448	99.97	101.07	96.39105
## 3449	101.51	102.47	97.72623
## 3450	102.73	99.28	94.68391
## 3451	99.43	99.70	95.08446
## 3452	98.70	98.56	93.99725
## 3453	97.89	98.35	93.79697
## 3454	95.20	95.31	90.89770
## 3455	94.96	94.27	89.90585
## 3456	94.78	92.74	88.44669
## 3457	92.32	92.66	88.37038
## 3458	92.05	93.47	89.14288
## 3459	95.06	96.16	91.70836
## 3460	96.03	95.35	90.93585
## 3461	95.35	96.27	91.81325
## 3462	97.12	96.97	92.48086
## 3463	95.25	97.89	93.35826
## 3464	98.32	99.04	95.33151
## 3465	100.07	98.02	94.34970
## 3466	98.96	99.73	95.99567
## 3467	100.51	101.78	97.96891
## 3468	102.00	101.20	97.41063
## 3469	101.10	102.44	98.60420
## 3470	103.00	100.78	97.00635
## 3471	101.03	100.22	96.46733
## 3472	99.10	101.72	97.91116
## 3473	101.41	101.51	97.70902
## 3474	101.60	99.80	96.06306
## 3475	100.31	100.37	96.61172
## 3476	100.36	99.37	95.64915
## 3477	99.32	102.88	99.02771
## 3478	103.50	103.81	99.92289
## 3479	102.65	101.24	97.44913
## 3480	100.51	99.33	95.61064
## 3481	97.50	96.54	92.92511
## 3482	96.12	97.17	93.53153
## 3483	97.91	98.04	94.36894
## 3484	99.39	100.25	96.49620
## 3485	103.02	103.41	99.53787
## 3486	101.00	100.25	96.49620
## 3487	101.06	104.35	100.44267
## 3488	105.03	102.96	99.10473
## 3489	113.16	116.90	112.52274
## 3490	117.35	116.52	112.15697
## 3491	116.89	114.78	110.48213
## 3492	112.53	113.37	109.12492
## 3493	114.70	114.08	109.80835
## 3494	117.79	117.30	112.90778

## 3495	115.39	116.11	111.76232
## 3496	117.34	115.25	110.93453
## 3497	114.18	115.56	111.23291
## 3498	114.43	114.57	110.28000
## 3499	116.05	117.87	113.45643
## 3500	120.07	123.32	118.70236
## 3501	121.37	122.03	117.46066
## 3502	122.00	121.22	116.68099
## 3503	120.00	117.88	113.46605
## 3504	120.34	119.74	115.25640
## 3505	119.70	122.04	117.47028
## 3506	121.85	121.24	116.70025
## 3507	122.48	122.34	117.75905
## 3508	121.15	121.88	117.31628
## 3509	121.04	122.00	117.43178
## 3510	123.17	121.05	116.51736
## 3511	119.99	120.27	115.76656
## 3512	118.94	119.56	115.08315
## 3513	121.34	118.30	113.87034
## 3514	119.29	120.32	115.81469
## 3515	120.30	120.67	116.15159
## 3516	121.26	119.67	115.18903
## 3517	119.14	119.08	114.62112
## 3518	123.17	123.55	118.92374
## 3519	123.39	121.67	117.11414
## 3520	122.78	125.07	120.38683
## 3521	125.09	124.52	119.85741
## 3522	125.82	125.34	120.64671
## 3523	126.20	125.01	120.32907
## 3524	125.49	125.36	120.66598
## 3525	125.09	127.07	122.31194
## 3526	127.50	125.87	121.15688
## 3527	124.99	125.65	121.81612
## 3528	129.88	131.55	127.53610
## 3529	135.69	135.87	131.72429
## 3530	135.97	136.02	131.86972
## 3531	134.58	138.05	133.83775
## 3532	139.44	140.22	135.94154
## 3533	138.59	140.35	136.06761
## 3534	140.49	141.17	136.86258
## 3535	137.43	138.64	134.40977
## 3536	139.86	138.04	133.82805
## 3537	137.82	135.97	131.82123
## 3538	135.69	134.83	130.71600
## 3539	132.69	133.79	129.70775
## 3540	132.14	132.12	128.08870
## 3541	132.75	131.58	127.56519
## 3542	129.59	127.86	123.95869
## 3543	129.90	130.11	126.14003
## 3544	131.19	128.67	124.74398
## 3545	129.40	129.62	125.66499
## 3546	131.94	133.61	129.53323
## 3547	133.65	135.14	131.01656
## 3548	135.47	138.25	134.03166

## 3549	139.39	137.98	133.76991
## 3550	138.20	140.14	135.86401
## 3551	139.43	139.58	135.32109
## 3552	140.00	139.66	135.39865
## 3553	139.66	139.27	135.02054
## 3554	139.05	141.25	136.94014
## 3555	143.55	144.65	140.23637
## 3556	143.95	145.10	140.67267
## 3557	144.00	145.59	141.14771
## 3558	145.86	148.02	143.50357
## 3559	146.87	149.41	144.85117
## 3560	151.51	150.61	146.01453
## 3561	150.11	153.26	148.58368
## 3562	154.27	151.18	146.56714
## 3563	150.30	147.17	142.67950
## 3564	149.52	150.50	145.90788
## 3565	150.08	150.01	145.43283
## 3566	151.23	152.91	148.24437
## 3567	152.61	150.56	145.96606
## 3568	153.22	150.91	146.30537
## 3569	152.47	152.91	148.24437
## 3570	151.50	151.83	147.19731
## 3571	151.91	155.13	150.39662
## 3572	154.11	154.32	149.61134
## 3573	156.86	156.15	151.38550
## 3574	156.35	155.37	150.62929
## 3575	154.09	153.51	148.82603
## 3576	155.34	155.09	150.35785
## 3577	157.60	157.65	152.83974
## 3578	155.51	155.14	150.40630
## 3579	152.80	150.97	146.36356
## 3580	150.33	149.46	144.89963
## 3581	150.00	150.62	146.02422
## 3582	150.00	152.55	147.89534
## 3583	154.30	155.09	150.35785
## 3584	152.12	152.68	148.02138
## 3585	154.46	154.48	149.76645
## 3586	153.28	152.23	147.58510
## 3587	151.90	153.71	149.01994
## 3588	154.40	153.62	149.80986
## 3589	152.79	152.54	148.75664
## 3590	153.10	154.93	151.08736
## 3591	154.00	155.12	151.27266
## 3592	155.81	156.28	152.40389
## 3593	155.58	155.95	152.08206
## 3594	154.75	154.09	150.26820
## 3595	151.47	151.21	147.45964
## 3596	151.25	152.17	148.39581
## 3597	153.87	153.30	149.49779
## 3598	153.42	152.65	148.86391
## 3599	151.74	149.27	145.56775
## 3600	147.79	150.54	146.80624
## 3601	150.23	147.37	143.71487
## 3602	147.18	150.19	146.46493

## 3603	150.78	150.56	146.82576
## 3604	150.50	151.25	147.49864
## 3605	152.43	152.23	148.45433
## 3606	153.54	155.19	151.34091
## 3607	154.10	153.81	149.99515
## 3608	154.85	153.36	149.55631
## 3609	152.87	155.48	151.62372
## 3610	156.00	157.52	153.61313
## 3611	158.07	160.69	156.70450
## 3612	157.22	161.24	157.24087
## 3613	161.50	161.22	157.22136
## 3614	161.08	158.54	154.60782
## 3615	159.61	157.45	153.54488
## 3616	158.18	161.50	157.49442
## 3617	162.39	164.01	159.94215
## 3618	163.37	164.67	160.58580
## 3619	164.68	162.35	158.32333
## 3620	161.00	161.11	157.11408
## 3621	160.83	160.83	156.84103
## 3622	161.34	162.66	158.62564
## 3623	163.36	163.54	159.48383
## 3624	163.85	161.85	157.83574
## 3625	163.57	161.83	157.81624
## 3626	163.95	164.35	160.27374
## 3627	164.68	164.24	160.16644
## 3628	165.87	166.05	161.93158
## 3629	167.26	166.06	161.94132
## 3630	165.41	166.17	162.04858
## 3631	166.21	166.44	162.31190
## 3632	167.00	165.66	161.55124
## 3633	164.49	165.00	160.90761
## 3634	164.14	162.94	158.89870
## 3635	164.36	160.40	156.42168
## 3636	160.43	160.29	156.31442
## 3637	160.15	157.57	153.66191
## 3638	156.70	155.18	151.33116
## 3639	154.73	156.27	152.39415
## 3640	157.10	151.76	147.99597
## 3641	149.30	147.92	144.25122
## 3642	149.08	150.43	146.69899
## 3643	150.60	150.21	146.48444
## 3644	150.20	151.12	147.37186
## 3645	151.92	152.51	148.72740
## 3646	152.59	154.05	150.22920
## 3647	153.70	154.33	150.50224
## 3648	155.00	154.14	150.31699
## 3649	153.75	155.54	151.68224
## 3650	156.26	157.08	153.18405
## 3651	155.95	156.03	153.03693
## 3652	155.78	153.41	150.46718
## 3653	152.01	153.59	150.64372
## 3654	151.61	150.94	148.04456
## 3655	153.05	155.77	152.78191
## 3656	154.35	158.00	154.96913

## 3657	156.05	155.65	152.66420
## 3658	155.95	155.12	152.14438
## 3659	153.90	155.46	152.47788
## 3660	155.96	151.91	148.99594
## 3661	148.55	146.97	144.15071
## 3662	146.52	149.71	146.83817
## 3663	152.05	152.86	149.92772
## 3664	152.88	150.93	148.03474
## 3665	151.48	150.64	147.75032
## 3666	150.19	151.65	148.74094
## 3667	150.40	151.45	148.54478
## 3668	152.29	151.70	148.78998
## 3669	153.14	153.00	150.06505
## 3670	152.58	151.78	148.86845
## 3671	152.03	151.17	148.27016
## 3672	151.95	152.89	149.95717
## 3673	151.25	151.24	148.33881
## 3674	152.28	153.15	150.21216
## 3675	155.19	157.50	154.47873
## 3676	157.52	157.33	154.31198
## 3677	156.74	159.26	156.20496
## 3678	160.00	161.16	158.06851
## 3679	161.88	161.79	158.68643
## 3680	161.79	159.98	156.91113
## 3681	158.94	158.93	155.88129
## 3682	157.57	157.01	153.99811
## 3683	156.31	155.58	152.59555
## 3684	153.16	154.28	151.32048
## 3685	154.35	154.72	151.75205
## 3686	155.33	156.70	153.69406
## 3687	157.00	157.67	154.64545
## 3688	158.51	160.92	157.83311
## 3689	162.26	161.75	158.64720
## 3690	161.75	163.05	159.92226
## 3691	163.21	160.44	157.36234
## 3692	160.44	159.95	156.88173
## 3693	160.22	159.72	156.65613
## 3694	160.02	160.46	157.38194
## 3695	160.39	159.49	156.43056
## 3696	159.99	159.21	156.15593
## 3697	158.89	158.50	155.45953
## 3698	158.27	159.19	156.13631
## 3699	160.56	157.36	154.34142
## 3700	158.53	159.86	156.79344
## 3701	160.45	157.07	154.05698
## 3702	156.72	158.16	155.12607
## 3703	159.41	158.09	155.05739
## 3704	157.38	157.68	154.65526
## 3705	153.89	152.96	150.02582
## 3706	153.53	152.98	150.04541
## 3707	155.20	155.91	152.91922
## 3708	158.00	161.18	158.08812
## 3709	161.44	163.04	159.91244
## 3710	165.00	166.98	163.77687

## 3711	167.70	166.08	162.89414
## 3712	166.21	165.95	162.76663
## 3713	166.92	163.69	160.54999
## 3714	164.00	167.13	163.92400
## 3715	166.97	166.95	163.74744
## 3716	167.21	168.66	166.42148
## 3717	167.99	169.02	166.77670
## 3718	171.20	170.09	167.83249
## 3719	170.02	170.22	167.96075
## 3720	170.80	166.64	164.42828
## 3721	165.75	165.36	163.16527
## 3722	164.07	161.00	158.86313
## 3723	161.75	163.47	161.30035
## 3724	165.35	166.61	164.39868
## 3725	166.48	166.55	164.33948
## 3726	167.40	168.57	166.33267
## 3727	168.30	170.84	168.57253
## 3728	170.76	169.50	167.25034
## 3729	170.03	171.78	169.50006
## 3730	172.71	170.94	168.67120
## 3731	171.00	171.40	169.12509
## 3732	170.32	167.83	165.60249
## 3733	168.30	170.36	168.09891
## 3734	171.18	169.89	167.63515
## 3735	172.04	169.80	167.54634
## 3736	169.80	170.47	168.20746
## 3737	170.13	170.53	168.26665
## 3738	170.00	168.29	166.05638
## 3739	168.90	168.05	165.81958
## 3740	169.05	169.06	166.81616
## 3741	167.35	167.78	165.55315
## 3742	167.45	167.62	165.39526
## 3743	167.52	167.61	165.38541
## 3744	167.65	166.86	164.64537
## 3745	167.21	166.56	164.34933
## 3746	167.06	165.36	163.16527
## 3747	165.21	164.47	162.28708
## 3748	164.39	163.05	160.88594
## 3749	161.30	160.92	158.78420
## 3750	164.16	164.35	162.16869
## 3751	165.50	168.28	166.04651
## 3752	168.46	166.96	164.74403
## 3753	162.14	161.93	159.78079
## 3754	163.31	161.23	159.09007
## 3755	159.16	158.83	156.72194
## 3756	161.00	157.89	155.79442
## 3757	159.83	161.21	159.07036
## 3758	161.50	158.29	156.18910
## 3759	161.01	160.16	158.03429
## 3760	161.88	162.57	160.41231
## 3761	162.66	160.71	158.57700
## 3762	159.65	160.46	158.33032
## 3763	161.32	159.82	157.69881
## 3764	159.50	157.92	155.82400

## 3765	157.45	159.13	157.01796
## 3766	159.85	157.94	155.84375
## 3767	160.39	160.41	158.28098
## 3768	159.32	156.76	154.67941
## 3769	154.51	153.94	151.89685
## 3770	155.41	156.09	154.01831
## 3771	155.75	156.70	154.62021
## 3772	157.61	157.26	155.17278
## 3773	157.60	158.16	156.06084
## 3774	158.20	158.64	156.53445
## 3775	158.85	158.56	156.45552
## 3776	159.11	158.48	156.37657
## 3777	158.45	158.35	156.24832
## 3778	159.86	161.70	159.55385
## 3779	164.31	167.83	165.60249
## 3780	167.82	163.78	162.57494
## 3781	166.91	165.52	164.30214
## 3782	165.67	167.16	165.93007
## 3783	169.07	167.32	166.08890
## 3784	168.26	167.49	166.25764
## 3785	168.46	168.44	167.20065
## 3786	168.34	168.23	166.99219
## 3787	160.76	157.89	156.72827
## 3788	155.78	151.27	150.15698
## 3789	151.57	148.93	147.83418
## 3790	148.99	147.66	146.57355
## 3791	147.50	145.08	144.01253
## 3792	142.28	144.95	143.88348
## 3793	143.65	146.53	145.45186
## 3794	148.72	147.92	146.83164
## 3795	149.42	145.31	144.24083
## 3796	144.19	146.61	145.53126
## 3797	145.64	148.60	147.50664
## 3798	148.69	151.15	150.03786
## 3799	150.50	149.94	148.83676
## 3800	150.00	148.70	147.60588
## 3801	149.10	152.56	151.43749
## 3802	153.27	153.07	151.94374
## 3803	155.00	155.95	154.80254
## 3804	156.59	156.60	155.44777
## 3805	156.66	155.95	154.80254
## 3806	155.61	153.92	152.78748
## 3807	152.73	152.49	151.36801
## 3808	154.51	154.72	153.58160
## 3809	153.74	155.00	153.85954
## 3810	153.00	151.43	150.31580
## 3811	152.13	152.14	151.02058
## 3812	150.60	151.87	150.75256
## 3813	153.12	148.69	147.59596
## 3814	142.94	144.55	143.48644
## 3815	145.25	147.97	146.88126
## 3816	143.55	141.80	140.75667
## 3817	140.04	136.45	135.44601
## 3818	137.29	139.28	138.25520

## 3819	139.84	138.29	137.27248
## 3820	134.94	134.40	133.41110
## 3821	132.17	129.21	128.25931
## 3822	129.64	128.30	127.35599
## 3823	132.90	133.44	132.45818
## 3824	131.86	131.86	130.88980
## 3825	132.49	128.89	127.94165
## 3826	129.46	130.17	129.21223
## 3827	131.80	132.48	131.50523
## 3828	134.87	138.40	137.38167
## 3829	136.86	140.15	139.11879
## 3830	140.19	140.10	139.06917
## 3831	140.35	139.65	138.62247
## 3832	142.27	142.62	141.57062
## 3833	140.98	139.78	138.75153
## 3834	140.30	140.69	139.65483
## 3835	141.09	141.92	140.87578
## 3836	140.00	140.87	139.83350
## 3837	143.35	141.18	140.14122
## 3838	141.90	140.54	139.50592
## 3839	139.83	136.32	135.31699
## 3840	137.40	135.31	134.31441
## 3841	134.12	135.91	134.91000
## 3842	134.07	133.34	133.34000
## 3843	131.58	131.49	131.49000
## 3844	130.95	131.09	131.09000
## 3845	131.67	133.49	133.49000
## 3846	133.00	133.00	133.00000
## 3847	132.14	131.54	131.53999
## 3848	126.94	127.30	127.30000
## 3849	126.50	126.12	126.12000
## 3850	125.67	128.46	128.46001
## 3851	128.45	131.12	131.11999
## 3852	132.52	131.58	131.58000
## 3853	132.22	130.56	130.56000
## 3854	130.28	126.81	126.81000
## 3855	126.01	126.77	126.77000
## 3856	124.64	123.02	123.02000
## 3857	122.33	121.42	121.42000
## 3858	122.81	123.34	123.34000
## 3859	123.05	119.36	119.36000
## 3860	119.88	120.45	120.45000
## 3861	121.53	123.03	123.03000
## 3862	122.80	127.10	127.10000
## 3863	125.25	123.92	123.92000
## 3864	123.80	123.72	123.72000
## 3865	122.11	121.86	121.86000
## 3866	123.11	118.89	118.89000
## 3867	119.30	118.14	118.14000
## 3868	117.00	118.04	118.04000
## 3869	119.41	119.09	119.09000
## 3870	118.54	118.26	118.26000
## 3871	121.04	122.18	122.18000
## 3872	121.30	120.09	120.09000

```
## 3873 118.19 118.31 118.31000
## 3874 119.46 117.34 117.34000
## 3875 120.46 124.60 124.60000
## 3876 124.36 126.36 126.36000
## 3877 126.28 127.24 127.24000
## 3878 128.37 129.44 129.44000
## 3879 130.16 131.27 131.27000
## 3880 130.18 132.23 132.23000
```

```
mean_Open = mean(subset[["JPM.Open"]])
print(mean_Open)
```

```
## [1] 72.50302
```

```
mean_Close = mean(subset[["JPM.Close"]])
print(mean_Close)
```

```
## [1] 72.49895
```

```
mean_Adjusted = mean(subset[["JPM.Adjusted"]])
print(mean_Adjusted)
```

```
## [1] 62.64605
```