SensexDataAnalysis

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This algorithm reads half year Sensex data for 50 stocks and ranks the stock based on difference between open price and closed prices. These 50 stockes are mixture of high performing and low performing stocks.

CODE

```
data = read.csv("S:/R/SENSEX DATA/sensexdata.csv")
maindata = data[,c(1,6)]
sensexdata = unique(maindata[,1])
i=1

maindd = data.frame(data =NA)
for(comp in sensexdata){
  print(comp)
  print(summary(maindata[maindata$Company == comp,2]))
  average= mean(maindata[maindata$Company == comp,2])
  sdvalue = sd(maindata[maindata$Company == comp,2])
  mddata = maindata[maindata$Company == comp,]
  initialvalue = mddata[1,2]
  len = length(mddata[,2])
  Finalvalue = mddata[len,2]
  diff = ((Finalvalue-initialvalue)/(initialvalue))
  maindd[i,1] = comp
  maindd[i,2] = as.numeric(round(average,2))
  maindd[i,3] = as.numeric(round(sdvalue,2))
  maindd[i,4] = as.numeric(round(initialvalue,2))
  maindd[i,5] = as.numeric(round(Finalvalue,2))
  maindd[i,6] = as.numeric(round(diff,3))
  i = i+1
}
```

```
## [1] "INFOSYS LTD"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   911.1   989.8  1033.0  1031.0  1061.0  1194.0
## [1] "HINDALCO.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   123.6   145.6   154.8   154.2   162.4   182.1
## [1] "TCS.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    2101    2302    2399    2402    2503    2738
## [1] "NIFTY"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    7908    8222    8573    8484    8689    8952
## [1] "TATASTEEL.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   317.7   370.2   388.2   387.1   408.7   437.0
## [1] "NESTLEIND.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    5768    6307    6511    6514    6789    7237
```

```
## [1] "TECHM.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   408.6   442.0   466.6   465.4   487.6   519.1
## [1] "HCLTECH.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   716.8   766.0   790.4   785.5   807.7   834.8
## [1] "HDFCBANK.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    1166    1199    1246    1238    1272    1313
## [1] "JETAIRWAYS.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   340.4   396.5   487.3   480.6   546.7   620.6
## [1] "BLUEDART.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    4181    4845    5395    5259    5577    6077
## [1] "AUROPHARMA.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   624.5   738.7   773.4   769.6   803.6   870.0
## [1] "APOLLOHOSP.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    1126    1238    1339    1307    1358    1416
## [1] "IOC.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   285.8   311.6   954.6   751.5  1128.0  1300.0
## [1] "HINDPETRO.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   396.8   435.6   454.2   992.3  1223.0  3511.0
## [1] "BHEL.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   117.2   132.2   137.9   136.5   141.2   159.6
## [1] "NTPC.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   144.8   152.8   157.5   156.7   160.4   166.8
## [1] "HINDZINC.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   177.2   219.4   233.4   236.5   254.6   285.3
## [1] "M&M.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   32.76   35.56   36.60   37.56   39.82   44.91
## [1] "RELIANCE.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   973.4  1005.0  1025.0  1034.0  1061.0  1111.0
## [1] "ONGC.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   189.0   338.2   367.4   361.2   410.0   448.1
## [1] "ORIENTBANK.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   102.5   116.2   120.0   120.7   126.2   137.7
## [1] "MARUTI.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    4141    4885    5141    5140    5513    5878
## [1] "ASHOKLEY.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   74.70   79.62   84.90   85.02   89.28   99.40
```

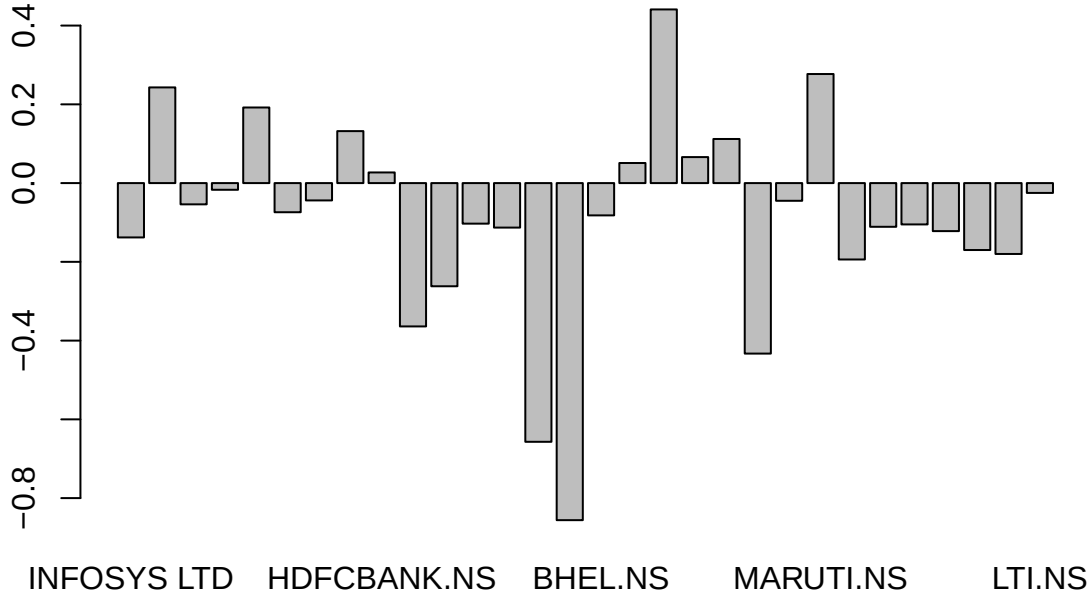
```
## [1] "ASIANPAINT.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   865.6   960.4  1085.0  1063.0  1157.0  1217.0
## [1] "DABUR.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   260.0   279.5   290.5   289.5   297.4   317.2
## [1] "DRREDDY.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##    2935    3051    3138    3176    3211    3677
## [1] "BHARTIARTL.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   292.2   309.4   321.8   328.5   348.6   378.9
## [1] "BATAINDIA.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   402.6   436.0   501.0   496.5   540.3   605.4
## [1] "LTI.NS"
##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##   600.5   626.0   644.0   647.7   675.1   700.9
```

```
colnames(maindd) = c("Company Name","Average","Standard Deviation","InitialVal","Finalval","diff")
ranks = rank(-maindd[,6])
maindd = cbind(maindd,ranks)
print(maindd)
```

```
##     Company Name Average Standard Deviation InitialVal Finalval   diff
## 1    INFOSYS LTD 1031.07              60.40    1172.40  1010.60 -0.138
## 2    HINDALCO.NS  154.18              14.17     124.75   155.05  0.243
## 3         TCS.NS 2402.00             154.48    2500.85  2365.55 -0.054
## 4          NIFTY 8483.71             269.63    8328.35  8185.80 -0.017
## 5   TATASTEEL.NS  387.15              25.65     328.10   391.25  0.192
## 6   NESTLEIND.NS 6514.46             335.91    6509.70  6028.35 -0.074
## 7       TECHM.NS  465.44              28.75     511.40   488.90 -0.044
## 8     HCLTECH.NS  785.49              30.03     731.70   827.95  0.132
## 9    HDFCBANK.NS 1238.13              40.09    1174.50  1206.20  0.027
## 10 JETAIRWAYS.NS  480.64              82.36     546.35   347.60 -0.364
## 11   BLUEDART.NS 5259.11             519.96    5944.40  4385.45 -0.262
## 12 AUROPHARMA.NS  769.64              52.75     746.25   669.30 -0.103
## 13 APOLLOHOSP.NS 1306.68              74.99    1329.85  1179.90 -0.113
## 14        IOC.NS  751.49             389.67     948.60   325.05 -0.657
## 15  HINDPETRO.NS  992.28             899.46    3063.90   441.30 -0.856
## 16       BHEL.NS  136.54               8.21     132.05   121.20 -0.082
## 17       NTPC.NS  156.75               5.05     156.75   164.75  0.051
## 18   HINDZINC.NS  236.46              27.58     177.25   255.40  0.441
## 19        M&M.NS   37.56               2.87      33.60    35.81  0.066
## 20   RELIANCE.NS 1034.29              35.50     973.45  1082.40  0.112
## 21       ONGC.NS  361.23              63.83     337.50   191.35 -0.433
## 22 ORIENTBANK.NS  120.71               7.08     110.95   106.00 -0.045
## 23     MARUTI.NS 5140.36             449.73    4165.40  5319.55  0.277
## 24   ASHOKLEY.NS   85.02               5.92      99.40    80.10 -0.194
## 25 ASIANPAINT.NS 1062.82             108.98    1002.50   891.05 -0.111
## 26      DABUR.NS  289.45              12.76     310.80   278.15 -0.105
## 27    DRREDDY.NS 3175.71             173.87    3484.10  3060.40 -0.122
## 28 BHARTIARTL.NS  328.53              23.32     368.35   305.65 -0.170
## 29  BATAINDIA.NS  496.52              55.39     549.35   450.40 -0.180
```

```
## 30        LTI.NS  647.68              27.37     697.60   680.05 -0.025
##    ranks
## 1     22
## 2      3
## 3     14
## 4     10
## 5      4
## 6     15
## 7     12
## 8      5
## 9      9
## 10    27
## 11    26
## 12    17
## 13    20
## 14    29
## 15    30
## 16    16
## 17     8
## 18     1
## 19     7
## 20     6
## 21    28
## 22    13
## 23     2
## 24    25
## 25    19
## 26    18
## 27    21
## 28    23
## 29    24
## 30    11
```

```
barplot(maindd$diff,names.arg=maindd$`Company Name`)
```




```
source("sensex.R")
```