① install dplyr and plotrix package (a)

install. package ("dplyr")
install. package ("plotrix")

② Setwd ("D:/ adarsh)

③ library (dplyr)
library (plotrix)

④ Reading of ○ CSV file

getdata ← read. CSV ("stock.CSV")
getdata
Sumary

⑤ # Pichanch

x ← c (5, 4, 3, 2, 1)
y ← c ("Bread", "Paint", "TCS", "cipla", "SBI"

⑥ # Barchart
x ← c (0, 56400000, 66100000, 68451020,
78300000, 142800000)

Png (file="barchart. png")
barplot (x)
dev. off)

Linechart

```
# Linechart                                    (2)
   L <- c(getdata $ low)
   L
   H <- c(getdata $ High)
   Png(file = "line-chart_2_line.jpg")
   lines(H, type = "o", col = "blue")
   dev.off()

Q-4 some Quantitive Data
   # Minimum
     min(getdata $ Volume)
   # Maximum
     max(getdata $ Volume)
   # mean
     mean(getdata $ Volume)
   # Quantile
     quantile(getdata $ volume)
     quantile(getdata $ Volume, 0.25)
     quantile(getdata $ volume, 0.75)

     var(getdata $ volume)

   # Summary
     Summary(getdata)
```

Plotting the graphs from stocks.csv

Installing dplyr and plotrix package

install.packages("dplyr")
install.packages("plotrix")

Setting of Working Directory

setwd("D:/adarsh")

Using library
library(dplyr)

```
library(plotrix)
```

Reading of .csv file

```
getdata<-read.csv("stocks.csv")
getdata
summary(getdata)
```
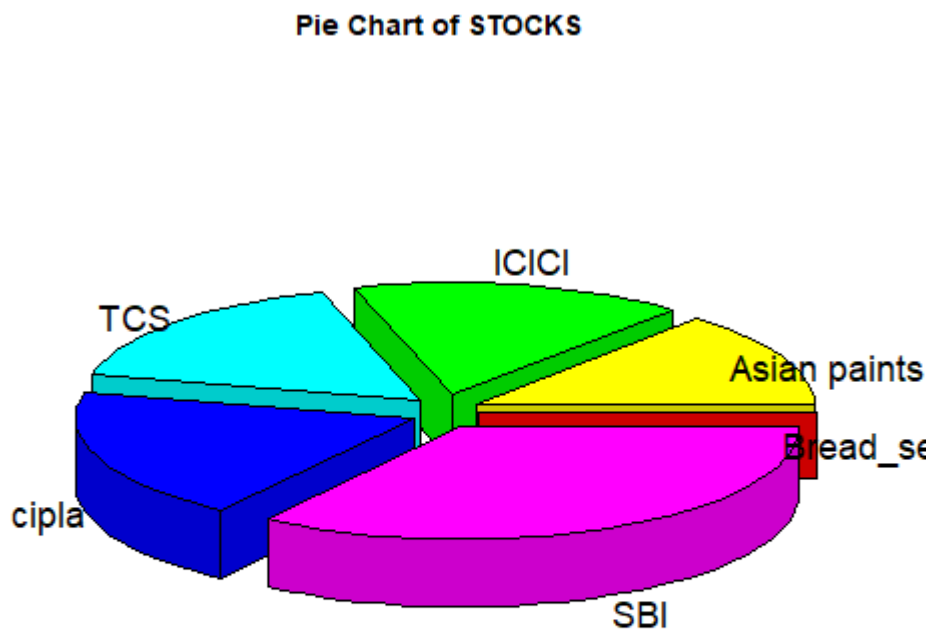
#PieChart
```
x<-c(0,56400000,66100000,68451020,78300000,142800000)
y<-c("Bread_sell","Asian paints","ICICI","TCS","cipla","SBI")
png(file = "3d_pie_chart.png")
pie3D(x,labels = y,explode = 0.1, main = "Pie Chart of STOCKS ")
dev.off()
#here we have created the pie chart of stocks and compare the values of
#different stocks
```
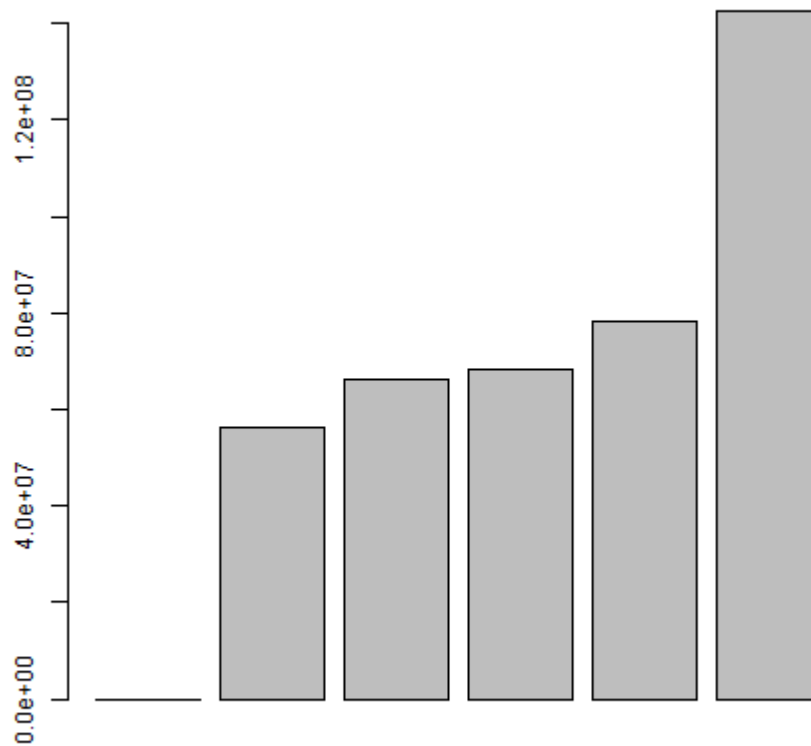
Pie Chart of STOCKS

#BarChart
```
x<-c(0,56400000,66100000,68451020,78300000,142800000)
png(file = "barchart.png")
barplot(x)
dev.off()
```

#BoxPlot
```
?boxplot
x<-c(0,56400000,66100000,68451020,78300000,142800000)
png(file = "boxplot.png")
boxplot(High ~ Low, data = getdata, xlab = " High",  ylab = "Low", main = " Data")
input <- stocks[,c('high','low')]
```
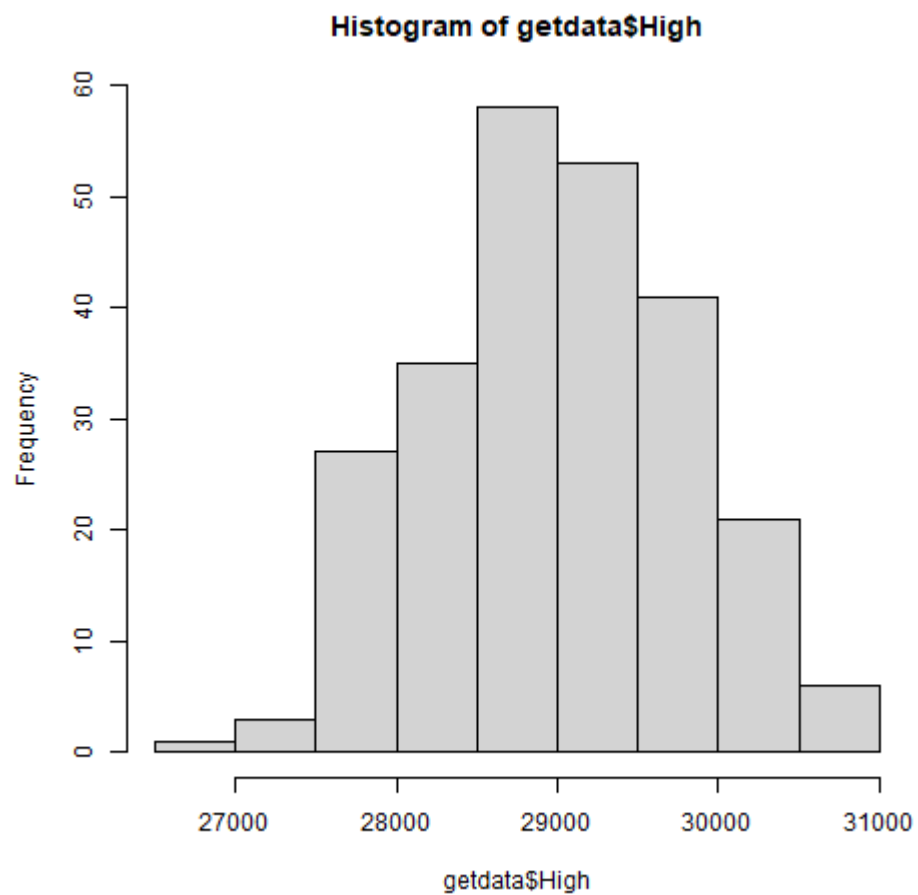
Histogram of getdata$High
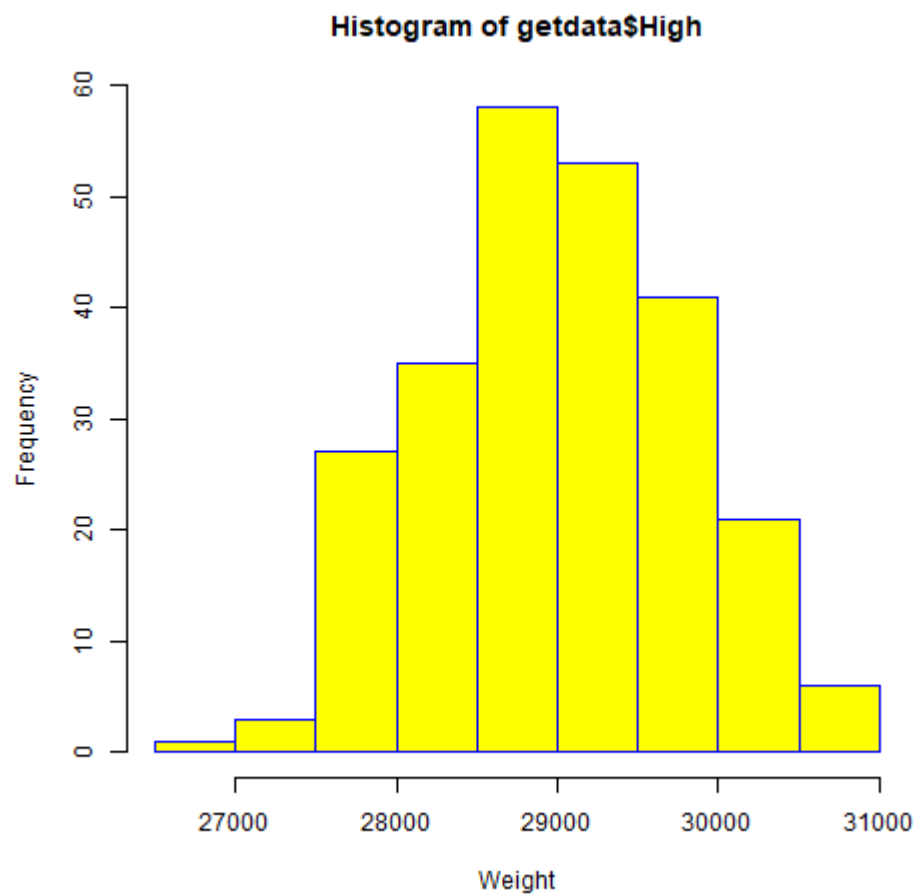
#Histogram
hist(getdata$High)
getdata$High
png(file = "histogram.png")
hist(getdata$High,xlab = "Weight",col = "yellow",border = "blue")
dev.off()

Histogram of getdata$High

```
hist(getdata$Low)
getdata$Low
png(file = "histogram1.png")
hist(getdata$High,xlab = "Weight",col = "green",border = "blue")
dev.off()
#creating histogram of high and low
```

#LineChart
```
L<-c(getdata$Low)
L
H<-c(getdata$High)
H
png(file = "line_chart_2_lines.jpg")
plot(L,type = "o",col = "red", xlab = "Low", ylab = "High", main = "comparsion between high and Low")
lines(H, type = "o", col = "blue")
dev.off()
#now by creating the line chart I am comparing higher and lower column
```

comparsion between high and Low
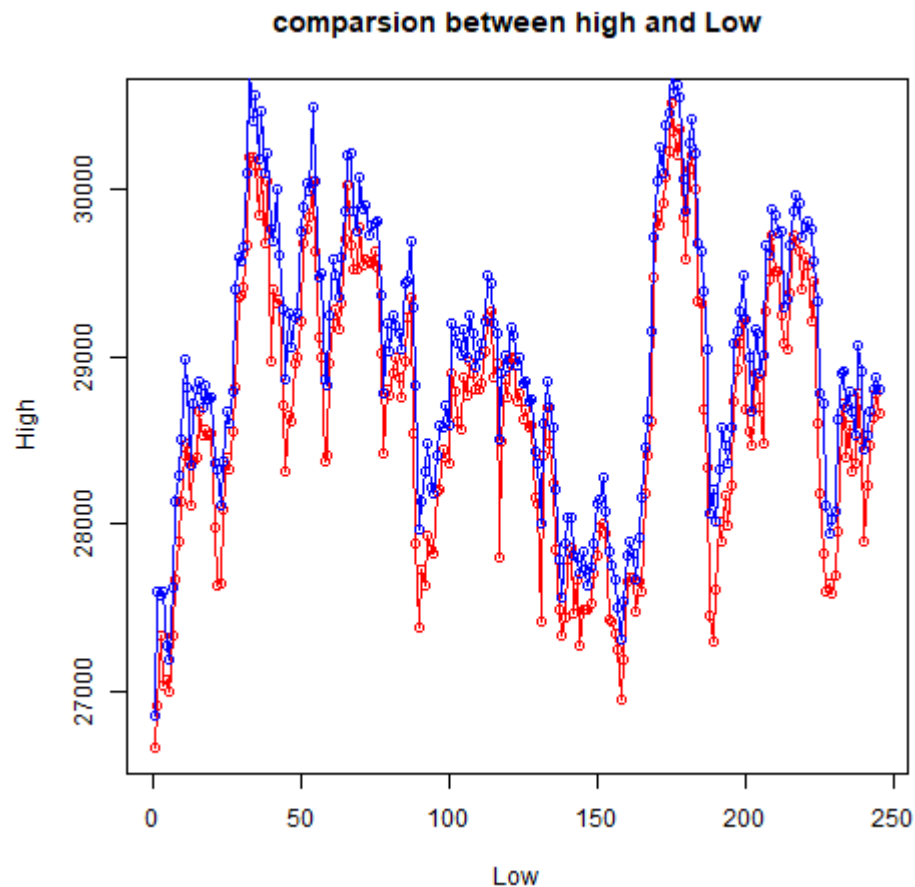
#ScatterChart
```
input <- getdata[,c('High','Low')]
png(file = "scatterplot1.png")
plot(getdata$Low,getdata$High,main='sctterplotof stocks' ,xlab='HIGH',ylab='LOW')
abline(lm(getdata$High~getdata$Low), col="red") # regression line (y~x)
lines(lowess(getdata$Low,getdata$High), col="blue") # lowess line (x,y)
dev.off()
```

sctterplotof stocks
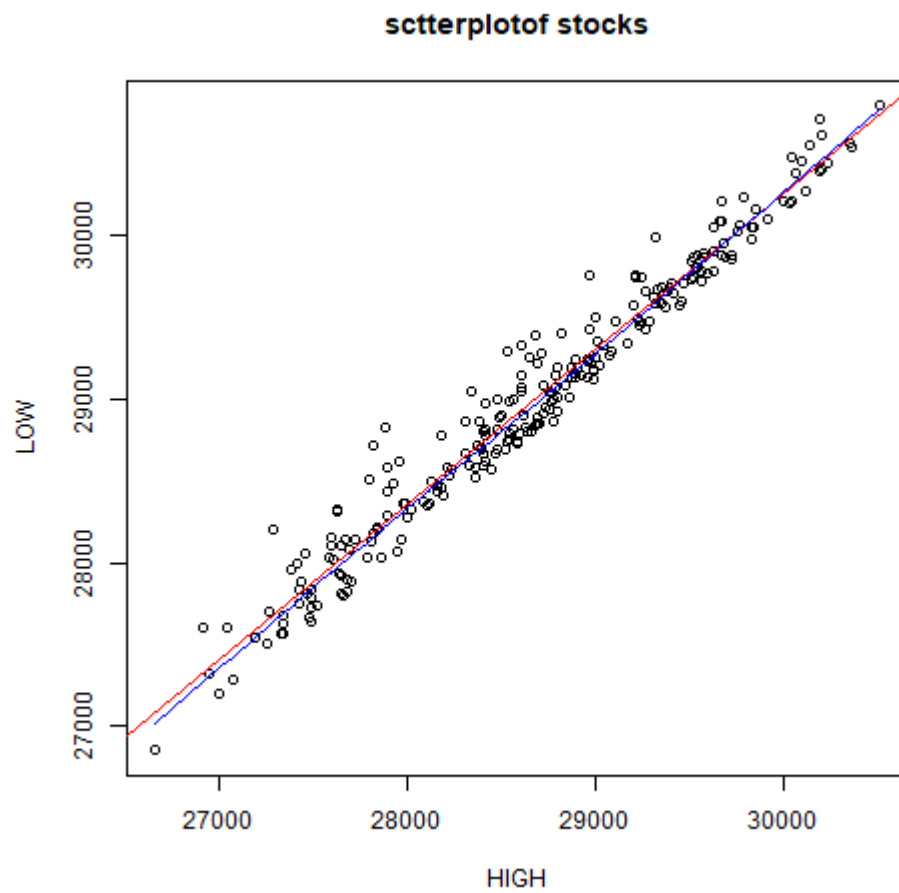
Some Quantitative Data

```
#Minimum
min(getdata$Volume)
# Maximum
max(getdata$Volume)
# Mean
mean(getdata$Volume)
# Median
 median(getdata$Volume)
# Quantile
quantile(getdata$Volume, 0.25)
quantile(getdata$ Volume, 0.75)
# Standard Deviation And Variance
sd(getdata$Volume)
var(getdata$Volume)
# Summary
summary(getdata)
```

```
> min(getdata$Volume)
[1] 0
> max(getdata$ Volume)
[1] 142800000
> mean(getdata$Volume)
[1] 68451020
> median(getdata$Volume)
[1] 66100000
> quantile(getdata$Volume, 0.25)
     25%
56400000
> quantile(getdata$ Volume, 0.75)
     75%
78300000
> sd(getdata$Volume)
[1] 17547686
> var(getdata$Volume)
[1] 3.079213e+14
> summary(getdata)
    Date               Open            High             Low
 Length:245        Min.   :26691   Min.   :26854   Min.   :26665
 Class :character  1st Qu.:28212   1st Qu.:28435   1st Qu.:27993
 Mode  :character  Median :28832   Median :28991   Median :28678
                   Mean   :28827   Mean   :28984   Mean   :28657
                   3rd Qu.:29442   3rd Qu.:29604   3rd Qu.:29311
                   Max.   :30606   Max.   :30796   Max.   :30505
     Close           Adj.Close          Volume
 Min.   :26854   Min.   :26854   Min.   :       0
 1st Qu.:28197   1st Qu.:28197   1st Qu.: 56400000
 Median :28813   Median :28813   Median : 66100000
 Mean   :28817   Mean   :28817   Mean   : 68451020
 3rd Qu.:29453   3rd Qu.:29453   3rd Qu.: 78300000
```