

—#Reference <https://www.kaggle.com/iamsouravbanerjee/nifty50-stocks-dataset> title: “assignment 1”
author: “vineeth goud maddi” date: “1/29/2022” output: pdf_document: default html_document: default

R Markdown

This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
summary(cars)
```

```
##      speed      dist
##  Min.   : 4.0    Min.   :  2.00
## 1st Qu.:12.0    1st Qu.: 26.00
##  Median :15.0    Median : 36.00
##   Mean  :15.4    Mean   : 42.98
## 3rd Qu.:19.0    3rd Qu.: 56.00
##   Max.  :25.0    Max.    :120.00
```

Including Plots

You can also embed plots, for example:

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.

```
getwd()
```

```
## [1] "/Users/vineethgoud"
```

```
#The library can be used to load the package
```

```
library(readr)
```

```
National <- read_csv("Downloads/National_Stock_Exchange_of_India_Ltd.csv")
```

```
## Rows: 50 Columns: 13
```

```
## -- Column specification -----
```

```
## Delimiter: ","
```

```
## chr (1): Symbol
```

```
## dbl (5): Chng, % Chng, Volume (lacs), 365 d % chng, 30 d % chng
```

```
##
```

```
## i Use `spec()` to retrieve the full column specification for this data.
```

```
## i Specify the column types or set `show_col_types = FALSE` to quiet this message.
```

```
View(National)
```

```
#summary can be used to print descriptive statistics such as mean,medium,mode on given variables
summary(National)
```

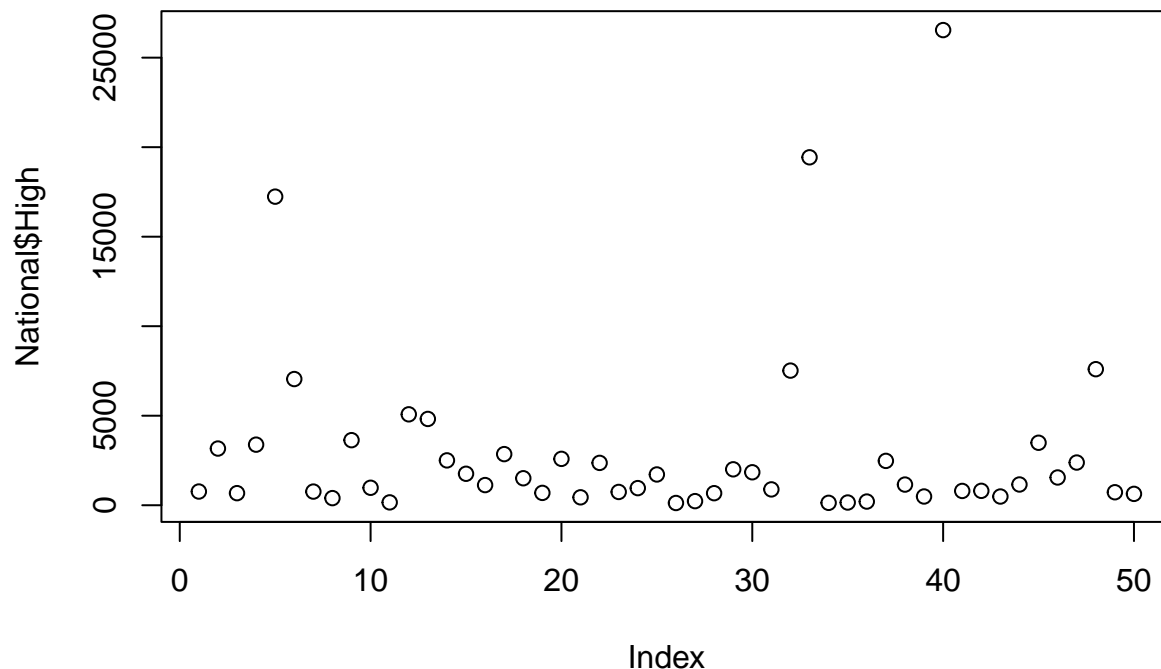
```
##      Symbol      Open      High      Low
## Length:50      Min.   : 125.6    Min.   : 125.6    Min.   : 120.5
## Class :character 1st Qu.: 673.0    1st Qu.: 678.4    1st Qu.: 662.1
## Mode  :character Median : 1156.0    Median : 1156.8    Median : 1105.8
##              Mean   : 2985.7    Mean   : 3017.3    Mean   : 2914.2
##              3rd Qu.: 2760.3    3rd Qu.: 2789.4    3rd Qu.: 2668.5
##              Max.   :26450.0    Max.   :26539.9    Max.   :25812.0
##              LTP      Chng      % Chng      Volume (lacs)
```

```
## Min.   : 121.2   Min.   : -770.500   Min.   : -7.480   Min.   : 0.30
## 1st Qu.: 663.2   1st Qu.: -66.775   1st Qu.: -4.527   1st Qu.: 13.47
## Median : 1121.2   Median : -29.975   Median : -3.300   Median : 30.75
## Mean   : 2939.6   Mean   : -70.133   Mean   : -2.930   Mean   : 71.27
## 3rd Qu.: 2690.4   3rd Qu.: -7.812   3rd Qu.: -1.933   3rd Qu.: 99.20
## Max.   : 25900.0   Max.   : 158.400   Max.   : 7.230   Max.   : 517.88
## Turnover (crs.)   52w H       52w L       365 d % chng
## Min.   : 76.94   Min.   : 141.5   Min.   : 77.05   Min.   : -16.020
## 1st Qu.: 195.90   1st Qu.: 777.8   1st Qu.: 391.84   1st Qu.: 9.375
## Median : 463.43   Median : 1456.1   Median : 819.77   Median : 35.860
## Mean   : 569.71   Mean   : 3440.6   Mean   : 2208.56   Mean   : 41.203
## 3rd Qu.: 744.50   3rd Qu.: 3388.0   3rd Qu.: 2272.60   3rd Qu.: 65.942
## Max.   : 2430.36   Max.   : 32048.0   Max.   : 22531.00   Max.   : 167.950
## 30 d % chng
## Min.   : -22.080
## 1st Qu.: -9.665
## Median : -5.705
## Mean   : -5.997
## 3rd Qu.: -2.223
## Max.   : 6.360
```

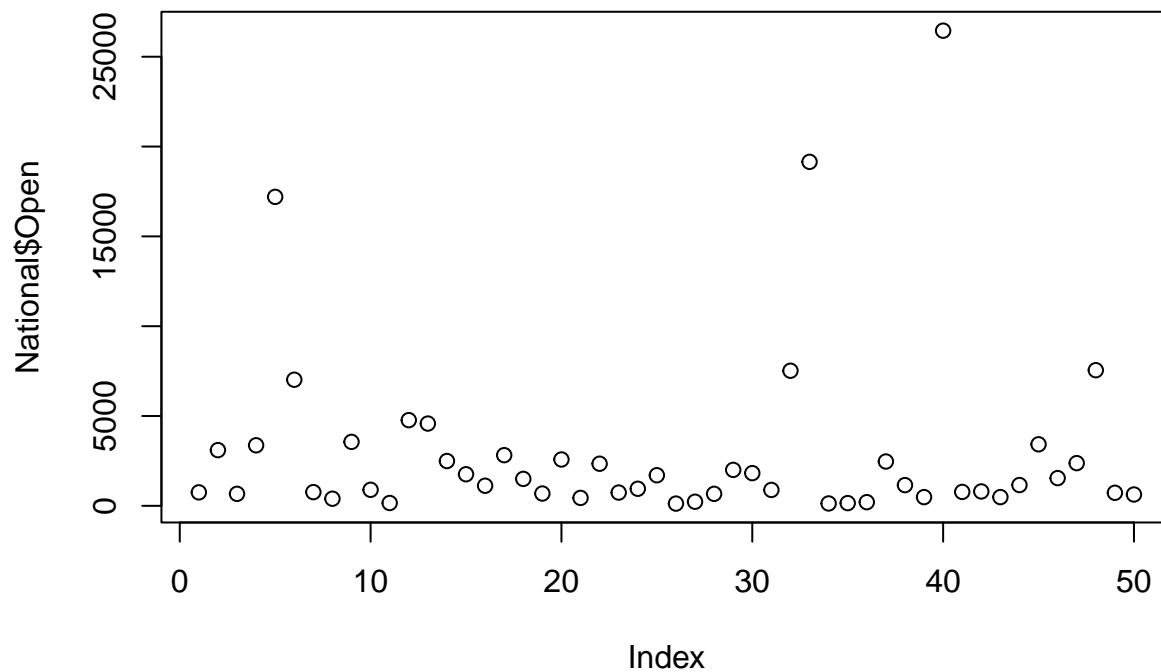
```
summary(National $High)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
## 125.6   678.4  1156.8  3017.3  2789.4 26539.9
```

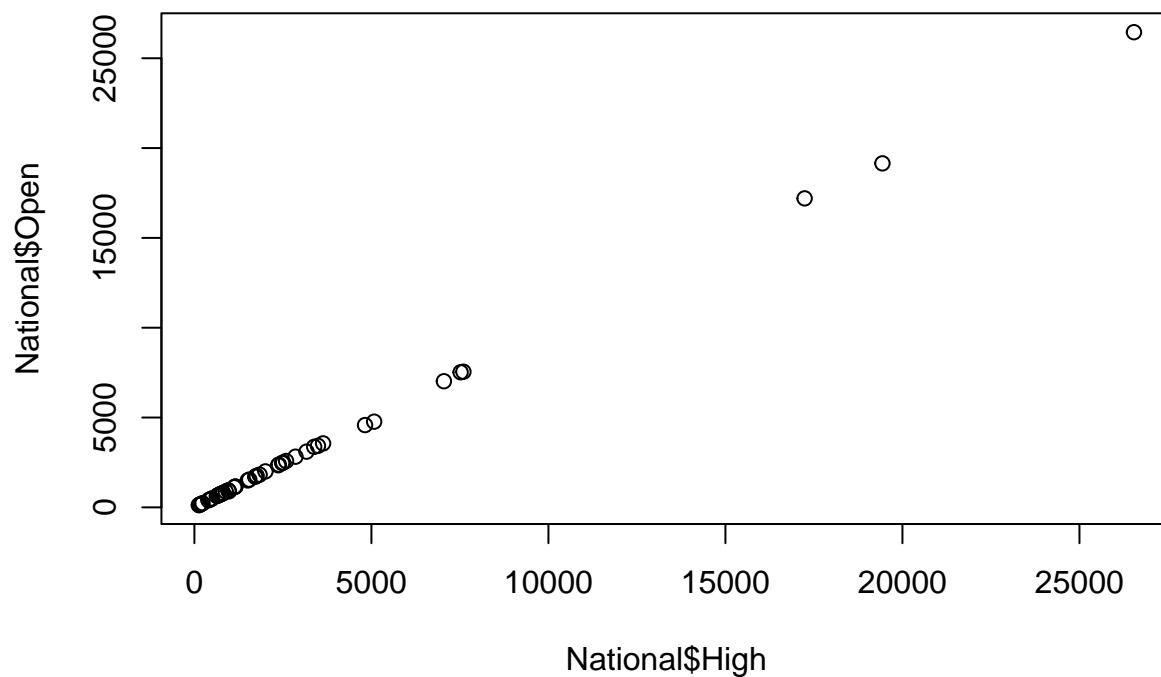
```
#The plot uses for only variable
plot(National $High)
```



```
plot(National $Open)
```



```
#The plot uses for plotting the data of given variables
plot(National $High, National $Open)
```



```
#To calculate log transformation
log(National $Open, National $High)
```

```
## [1] 0.9968215 0.9973736 0.9986522 0.9995080 0.9997785 0.9995684 1.0000000
## [8] 0.9999790 0.9974536 0.9869184 0.9979483 0.9926737 0.9939774 0.9994328
## [15] 0.9999581 0.9992396 0.9984214 0.9993910 0.9991091 0.9995225 0.9996660
## [22] 0.9988519 0.9993768 0.9990913 0.9987599 1.0000000 0.9990785 0.9990149
## [29] 0.9996720 0.9984199 1.0000000 1.0000000 0.9985026 0.9987013 1.0000000
## [36] 0.9991732 0.9994929 1.0000000 0.9994527 0.9996669 0.9954554 0.9991062
```

```
## [43] 0.9997508 0.9998043 0.9976954 0.9994720 0.9996058 0.9992760 1.0000000  
## [50] 0.9994126
```

```
#mean can be used for calculating the average in the given variable  
mean(National $Open)
```

```
## [1] 2985.739
```

```
#median can be used for calculating the median value in the given variables  
median.default(National $Open)
```

```
## [1] 1155.95
```

```
#sd can be used to calculate the standard deviation in the given variables  
sd(National $Open)
```

```
## [1] 5024.412
```