Assignment-1

Harika

2023-09-24

```
Amazon_Alexa_Reviews <- read.csv("C://Users//Harika//Downloads//Amazon_Alexa_Reviews//Amazon_Alexa_Revi
###following is the dataset that have been imported.The dataset represents Amazon alexa reviews.
```

```
View(Amazon_Alexa_Reviews)
###This dataset has been imported from https://www.kaggle.com/datasets/ruchihardaha/amazon-product-revi
```

```
mean(Amazon_Alexa_Reviews$Rating)
```

```
## [1] 4.022222
```

```
median(Amazon_Alexa_Reviews$Rating)
```

```
## [1] 4
```

```
mode(Amazon_Alexa_Reviews$Rating)
```

```
## [1] "numeric"
```

```
sd(Amazon_Alexa_Reviews$Rating)
```

```
## [1] 1.027463
```

```
range(Amazon_Alexa_Reviews$Rating)
```

```
## [1] 1 5
```

```
max(Amazon_Alexa_Reviews$Rating)
```

```
## [1] 5
```

```
min(Amazon_Alexa_Reviews$Rating)
```

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

```
###The above values represent descriptive statistics for a  selection of quantitative variables.The abo
```

```
table(Amazon_Alexa_Reviews$Review_Date)
```

```
##
##  1-Aug-23 12-Aug-23 12-Jul-23 12-Jun-23 12-May-23 14-Aug-23 14-Jul-23 14-Jun-23
##         1         1         3         1         2         3         2         1
## 15-Aug-23 15-Jun-23 15-May-23 16-Aug-23 16-Jul-23 16-Jun-23 18-Apr-23 18-Jul-23
##         3         1         1         1         1         1         1         2
## 18-Jun-23 19-Aug-23 19-Jul-23  2-Apr-23  2-Aug-23  2-Jun-23 20-Jul-23 20-Jun-23
##         1         2         1         1         3         1         1         1
## 21-Apr-23 21-Aug-23 21-Jul-23 21-May-23 22-Aug-23 22-Jul-23 22-Jun-23 22-May-23
##         1         1         1         1         1         2         3         2
## 23-Aug-23 23-Jun-23 24-Jul-23 24-Jun-23 24-May-23 25-Aug-23 26-Jun-23 26-Mar-23
##         1         1         2         2         1         1         1         1
## 27-Aug-23 27-Jul-23 28-Jul-23 28-Jun-23 29-Apr-23 29-Jun-23  3-Mar-23  3-May-23
##         1         1         1         1         1         2         1         1
## 30-Aug-23 30-Jul-23 30-Jun-23 31-Jul-23 31-May-23  4-Jul-23  5-Aug-23  5-Jul-23
##         2         1         2         3         1         1         1         1
##  5-Jun-23  6-Apr-23  6-Jul-23  6-Jun-23  7-Aug-23  7-Jul-23  7-Mar-23  8-Aug-23
##         1         1         1         1         1         1         1         1
##  8-Jun-23  9-Mar-23
##         1         2
```

```
###It creates a frequency table of unique values in "Review_Date" column.
```

```
str(Amazon_Alexa_Reviews$Review)
```

```
##  chr [1:90] "I liked this gen very much. The only disadvantage i found was that the alexa this was wa
```

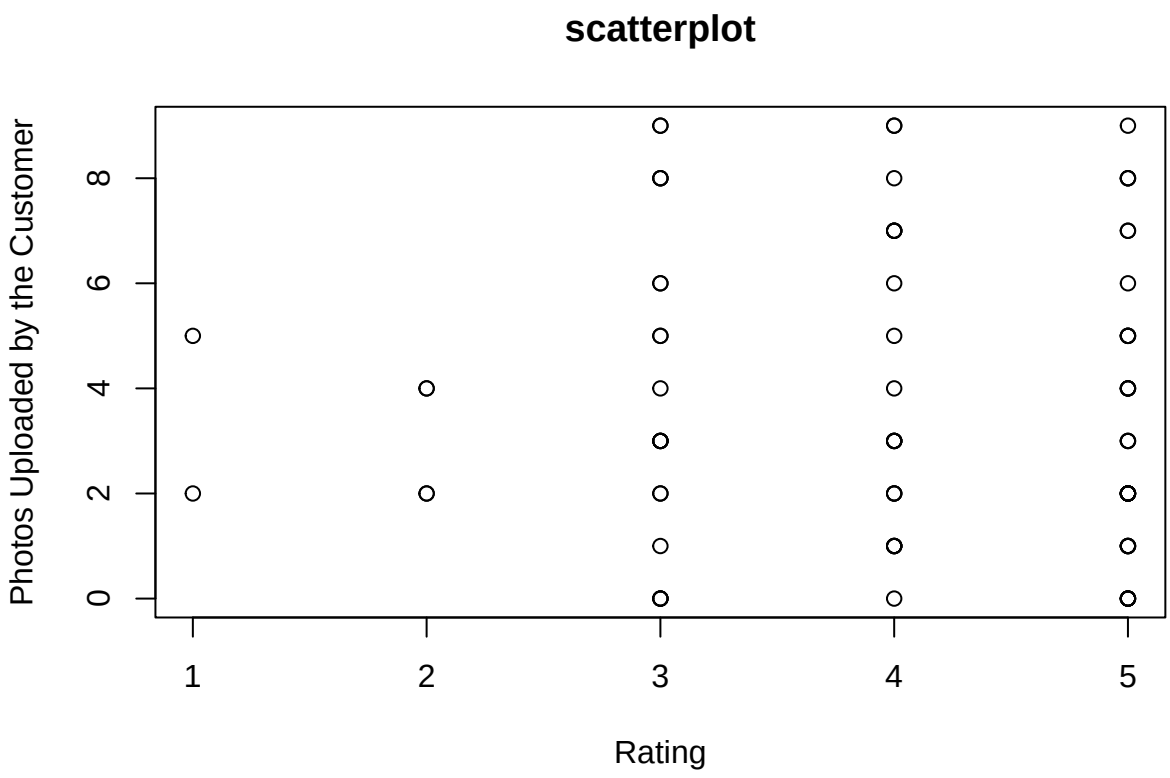
```
###The above values represent categorical descriptive analysis of the variables.
```

```
Amazon_Alexa_Reviews_transformed <- (Amazon_Alexa_Reviews$Rating - median(Amazon_Alexa_Reviews$Rating)/s
Amazon_Alexa_Reviews_transformed
```

```
##  [1]  0.1069161 -0.8930839  0.1069161  0.1069161  0.1069161  0.1069161
##  [7]  0.1069161  0.1069161  0.1069161  1.1069161 -0.8930839  0.1069161
## [13]  0.1069161 -0.8930839 -0.8930839 -0.8930839  0.1069161  0.1069161
## [19] -0.8930839  1.1069161  0.1069161  0.1069161  1.1069161 -0.8930839
## [25]  0.1069161  0.1069161  0.1069161 -0.8930839  1.1069161  1.1069161
## [31] -0.8930839  1.1069161 -0.8930839  0.1069161  1.1069161  1.1069161
## [37]  1.1069161  1.1069161  0.1069161  1.1069161  1.1069161  0.1069161
## [43] -0.8930839 -0.8930839  1.1069161  1.1069161  1.1069161  1.1069161
## [49]  1.1069161  1.1069161  1.1069161 -2.8930839 -0.8930839  0.1069161
## [55] -1.8930839  1.1069161  1.1069161 -0.8930839  1.1069161 -1.8930839
## [61] -0.8930839 -0.8930839  1.1069161  0.1069161  1.1069161 -0.8930839
## [67]  1.1069161 -0.8930839  1.1069161  1.1069161  1.1069161 -0.8930839
## [73]  1.1069161 -0.8930839  1.1069161 -0.8930839  1.1069161 -1.8930839
## [79]  1.1069161  1.1069161 -0.8930839 -1.8930839  1.1069161  1.1069161
## [85]  1.1069161  0.1069161  0.1069161  1.1069161  1.1069161 -2.8930839
```

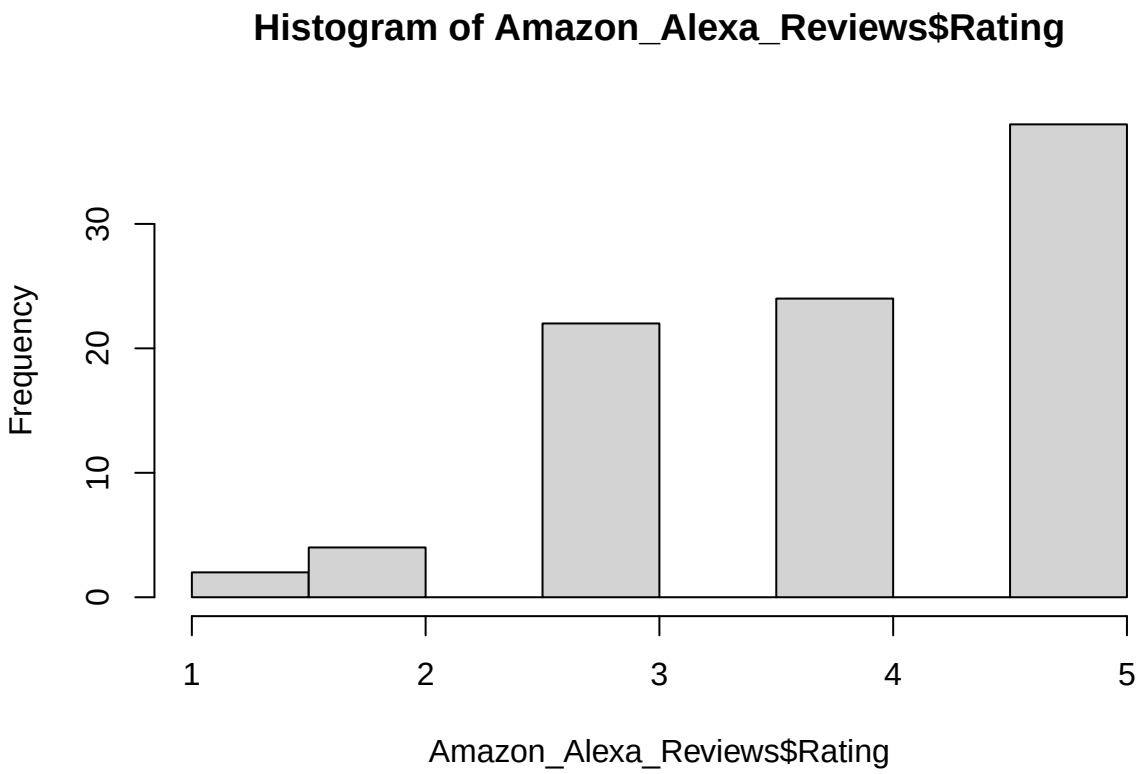
```
###Transformation of variables has been done above.
```

```
h <- Amazon_Alexa_Reviews$Rating
k <- Amazon_Alexa_Reviews$Photos.Uploaded.by.the.Customer
plot(h,k, main = "scatterplot", xlab = "Rating", ylab = "Photos Uploaded by the Customer")
```




```
###The above graphical representation is a scatterplot.
###The selected variables are Rating and Photos uploaded by the customers.
```

```
hist(Amazon_Alexa_Reviews$Rating)
```




```
###The above graphical representation is a histogram.
```