FML Assignment 1

2023-09-09

```
 priyankadataset <-read.csv("C://Users//priya//Downloads//priyankadataset//playlist_2010to2022.csv", nr
#following is the dataset that have been imported.The dataset represents spotify playlist

 View(priyankadataset)
 #The data has been imported from https://www.kaggle.com/datasets/josephinelsy/spotify-top-hit-playlist

 mean(priyankadataset$duration_ms)
```

```
## [1] 244370.8
```

```
 sd(priyankadataset$duration_ms)
```

```
## [1] 38025.81
```

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

 table(priyankadataset$album)
```

```
##
##                           ...And Then There Was X
##                                                 1
##                                              2001
##                                                 1
##                                           Aaliyah
##                                                 1
##                    All That You Can't Leave Behind
##                                                 1
##                  Before the Storm, Special Edition
##                                                 1
##                                       Black & Blue
##                                                 1
##                                              Blue
##                                                 1
##                                    Born to Do It
##                                                 1
##                                           Breathe
##                                                 1
##                   Californication (Deluxe Edition)
##                                                 1
## Chocolate Starfish And The Hot Dog Flavored Water
##                                                 1
##              Christina Aguilera (Expanded Edition)
```

```
##                                         2
##                 Coast To Coast (Expanded Edition)
##                                         1
##                               Country Grammar
##                                         1
##                             Enema Of The State
##                                         1
##                                      Go Get It
##                                         1
##                                   Hear My Cry
##                                         1
##                     Hybrid Theory (Bonus Edition)
##                                         1
##                                I Hope You Dance
##                                         1
##                                     I Need You
##                                         1
##                                       In Blue
##                                         1
##                                L'Amour Toujours
##                                         2
##                                   Lonely Grill
##                                         1
##                               Modjo (Remastered)
##                                         1
##                                  My Name Is Joe
##                                         1
##                              No Strings Attached
##                                         3
##                           Oops!... I Did It Again
##                                         1
##                                      Parachutes
##                                         1
##                                        Reload
##                                         1
##                          Sing When You're Winning
##                                         1
##                                      Survivor
##                                         1
##                                 The Better Life
##                                         1
##                                      The Heat
##                                         1
##                               The Madding Crowd
##                                         1
##                           The Marshall Mathers LP
##                                         1
##                        The Very Best of Celine Dion
##                                         1
##                          The Writing's On The Wall
##                                         2
##                 Title Of Record (Expanded Edition)
##                                         1
##                                Unleash The Dragon
```

```
##                                                1
##             Vol. 3... Life And Times Of S. Carter
##                                                1
##                                          Westlife
##                                                1
##                                           Wheatus
##                                                1
##                                Where I Wanna Be
##                                                1
##                             Who Let The Dogs Out
##                                                1
##                         Who Needs Guitars Anyway?
##                                                1
```

```
 str(priyankadataset$year)
```

```
##  int [1:50] 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 ...
```

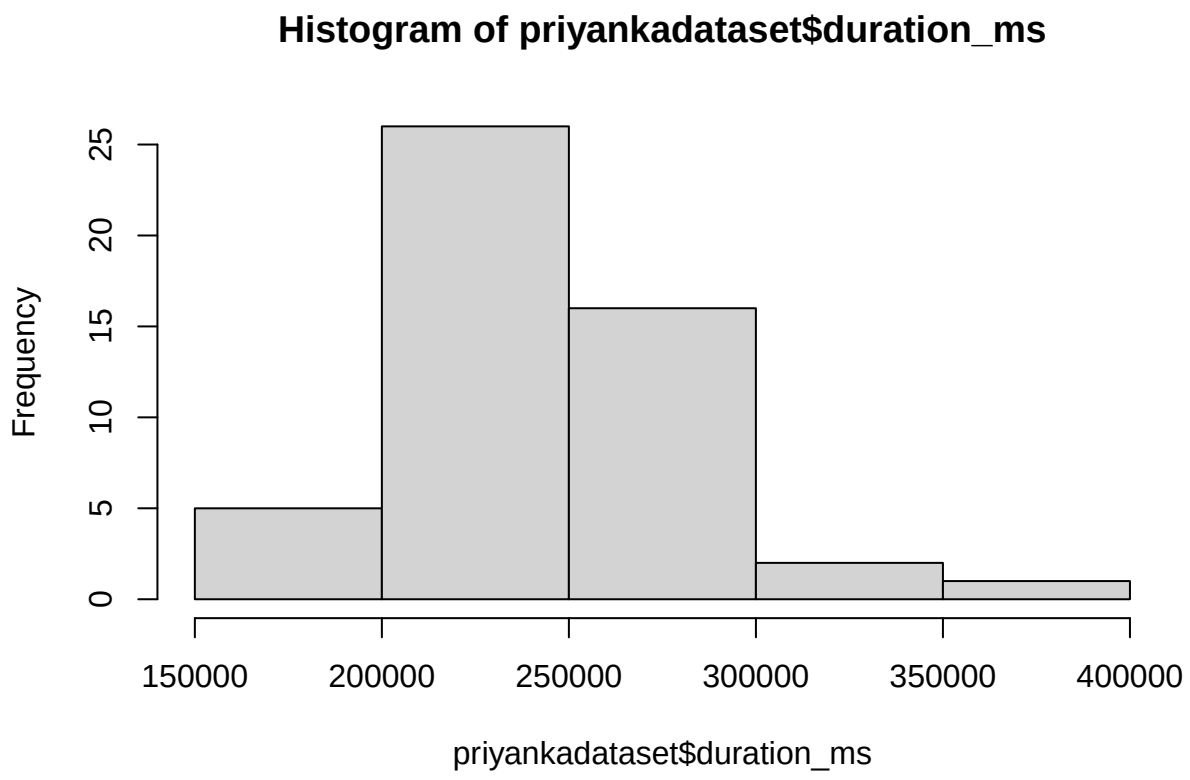
```
 # The above values represent categorical descriptive analysis of the variables.

 priyankadataset_transformed <- (priyankadataset$duration_ms - mean(priyankadataset$duration_ms)/sd(pri
priyankadataset_transformed
```

```
##  [1] 266766.6 167060.6 250540.6 216873.6 200393.6 253726.6 284193.6 260553.6
##  [9] 271326.6 255366.6 233926.6 222286.6 307147.6 214876.6 321033.6 242046.6
## [17] 241660.6 230086.6 283060.6 268860.6 230193.6 225486.6 235126.6 240860.6
## [25] 286993.6 207500.6 231753.6 192420.6 215500.6 284633.6 261926.6 206220.6
## [33] 189326.6 296686.6 198393.6 211886.6 221126.6 284753.6 243726.6 246393.6
## [41] 285420.6 294526.6 237233.6 203326.6 240860.6 363793.6 241366.6 198340.6
## [49] 215793.6 234860.6
```

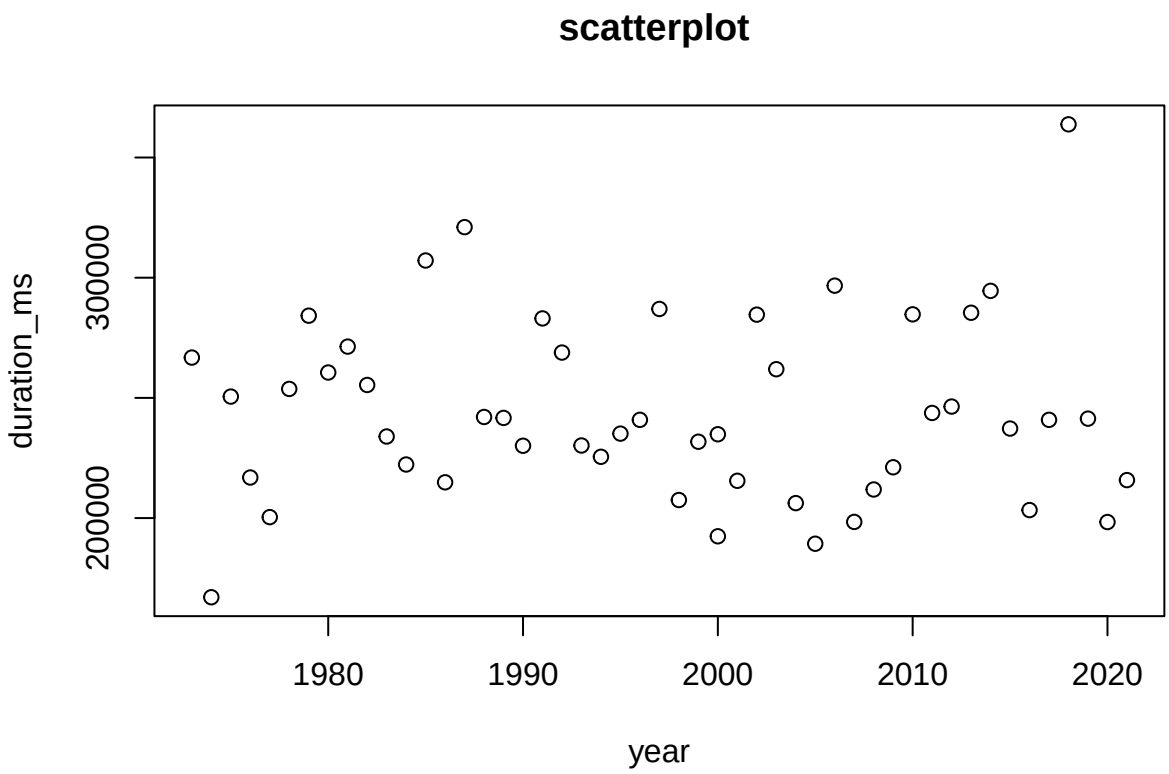
```
#Transformation of variables has been done above.

hist(priyankadataset$duration_ms)
```




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

x <- priyankadataset$year
y <- priyankadataset$duration_ms
plot(x,y, main = "scatterplot ", xlab = "year", ylab = "duration_ms")
```




```
#The above graphical representation is a scatterplot.
#The selected variables are year and duration_ms.
```