ASSIGNMENT 1 FML

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```
vamshidataset <-read.csv("C:/Users//vamsh//OneDrive//Documents//KENT SEM 01//FML//Assignment 01 FML//mo
#Following is the dataset that has been imported. The dataset represents imdb top 100 movies.
```

```
View(vamshidataset)
#The data has been taken from #https://www.kaggle.com/datasets/themrityunjaypathak/imdb-top-100-movies
```

```
mean(vamshidataset$imdb_rating)
```

```
## [1] 8.348485
```

```
sd(vamshidataset$imdb_rating)
```

```
## [1] 0.3687717
```

#The above values represent descriptive statistics for a selection of quantitative variables. The above values show the mean and the standard deviation for the quantitative variable Latitude.

```
table(vamshidataset$movie_name)
```

```
##
##                                    12 Angry Men
##                                               1
##                                      12 Monkeys
##                                               1
##                                 12 Years a Slave
##                                               1
##                            2001: A Space Odyssey
##                                               1
##                                 A Beautiful Mind
##                                               1
##                                           Alien
##                                               1
##                                          Aliens
##                                               1
##                                          Amélie
##                                               1
##                                  American Beauty
##                                               1
##                                   Apocalypse Now
```

```
##                                         1
##                                 As Good as It Gets
##                                         1
##                                       Avanti!
##                                         1
##                                 Back to the Future
##                                         1
##                                     Blade Runner
##                                         1
##                                    Braveheart
##                                         1
##                                    Casablanca
##                                         1
##                                  Children of Men
##                                         1
##                                     Chinatown
##                                         1
##                                  Citizen Kane
##                                         1
##                                   City Lights
##                                         1
##                                   City of God
##                                         1
##                                  Cool Hand Luke
##                                         1
##                                     Die Hard
##                                         1
##                                   District 9
##                                         1
##                                Django Unchained
##                                         1
##            Eternal Sunshine of the Spotless Mind
##                                         1
##                                       Fargo
##                                         1
##                                   Fight Club
##                                         1
##                                 Forrest Gump
##                                         1
##                               Full Metal Jacket
##                                         1
##                               Gone with the Wind
##                                         1
##                                   Goodfellas
##                                         1
##                                        Heat
##                                         1
##                                   Inception
##                                         1
##               Indiana Jones and the Last Crusade
##                                         1
##     Indiana Jones and the Raiders of the Lost Ark
##                                         1
##                             Inglourious Basterds
```

```
##                                         1
##                                Interstellar
##                                         1
##                           Kill Bill: Vol. 1
##                                         1
##                           L.A. Confidential
##                                         1
##                      Léon: The Professional
##                                         1
##                           Life Is Beautiful
##                                         1
##                                  Life of Pi
##                                         1
##                      Lost in Translation
##                                         1
##                       Mad Max: Fury Road
##                                         1
##                                  Magnolia
##                                         1
##                                  Memento
##                                         1
##                                Modern Times
##                                         1
##                                Mystic River
##                                         1
##                      No Country for Old Men
##                                         1
##                          North by Northwest
##                                         1
##                O Brother, Where Art Thou?
##                                         1
##           One Flew Over the Cuckoo's Nest
##                                         1
##                                Pulp Fiction
##                                         1
##                                   Rain Man
##                                         1
##                                 Ratatouille
##                                         1
##                                 Rear Window
##                                         1
##                      Requiem for a Dream
##                                         1
##                      Saving Private Ryan
##                                         1
##                         Schindler's List
##                                         1
##                                      Se7en
##                                         1
##                      Singin' in the Rain
##                                         1
##                      Slumdog Millionaire
##                                         1
##                         Some Like It Hot
```

```
##                                                 1
##                 Star Wars: Episode IV - A New Hope
##                                                 1
##    Star Wars: Episode V - The Empire Strikes Back
##                                                 1
##        Star Wars: Episode VI - Return of the Jedi
##                                                 1
##        Star Wars: Episode VII - The Force Awakens
##                                                 1
##                                       Taxi Driver
##                                                 1
##                         Terminator 2: Judgment Day
##                                                 1
##                       The Bridge on the River Kwai
##                                                 1
##                                    The Dark Knight
##                                                 1
##                               The Dark Knight Rises
##                                                 1
##                                     The Departed
##                                                 1
##                                    The Godfather
##                                                 1
##                             The Godfather: Part II
##                                                 1
##                     The Good, the Bad and the Ugly
##                                                 1
##                The Hobbit: The Desolation of Smaug
##                                                 1
##                                     The Insider
##                                                 1
##                                  The King's Speech
##                                                 1
##                                     The Lion King
##                                                 1
##                                  The Lives of Others
##                                                 1
## The Lord of the Rings: The Fellowship of the Ring
##                                                 1
##     The Lord of the Rings: The Return of the King
##                                                 1
##             The Lord of the Rings: The Two Towers
##                                                 1
##                                       The Matrix
##                                                 1
##                                     The Pianist
##                                                 1
##                                       The Piano
##                                                 1
##                                     The Prestige
##                                                 1
##                           The Shawshank Redemption
##                                                 1
##                                       The Shining
```

```
##                                         1
##                         The Silence of the Lambs
##                                         1
##                                     The Thing
##                                         1
##                                 The Third Man
##                                         1
##                               The Usual Suspects
##                                         1
##                             To Have and Have Not
##                                         1
##                                 Trainspotting
##                                         1
##                               V for Vendetta
##                                         1
##                                      Vertigo
##                                         1
```

```
str(vamshidataset$category)
```

```
##  chr [1:99] "R" "R" "PG" "R" "R" "PG" "R" "PG" "PG-13" "PG" "PG-13" "R" "R" ...
```

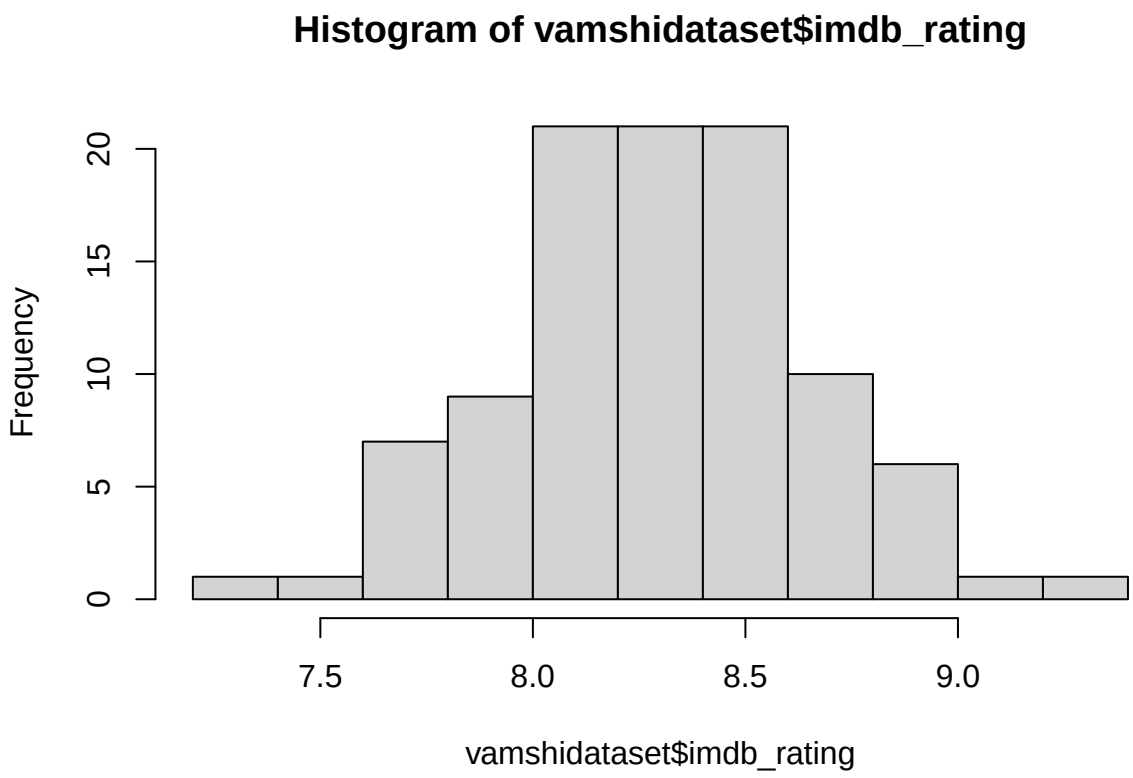
```
#The above values represent categorical descriptive analysis of the variables.
```

```
vamshidataset_transformed <- (vamshidataset$imdb_rating - mean(vamshidataset$imdb_rating)/sd(vamshidatas
vamshidataset_transformed
```

```
##  [1] -13.43863 -14.03863 -13.93863 -13.33863 -14.23863 -14.13863 -13.93863
##  [8] -14.23863 -13.63863 -14.03863 -13.63863 -13.63863 -14.23863 -13.63863
## [15] -13.83863 -13.83863 -14.13863 -14.43863 -14.53863 -14.03863 -14.13863
## [22] -13.63863 -13.83863 -14.03863 -14.33863 -14.43863 -14.43863 -14.43863
## [29] -13.73863 -14.43863 -14.13863 -14.33863 -14.13863 -14.13863 -14.13863
## [36] -14.33863 -13.93863 -14.23863 -14.23863 -14.93863 -13.83863 -14.33863
## [43] -14.23863 -14.03863 -14.63863 -14.63863 -14.33863 -14.43863 -15.43863
## [50] -13.83863 -14.33863 -14.13863 -14.93863 -14.33863 -14.33863 -13.83863
## [57] -14.43863 -14.23863 -14.73863 -14.53863 -14.23863 -14.13863 -14.43863
## [64] -14.43863 -14.03863 -14.83863 -14.53863 -14.73863 -14.63863 -14.33863
## [71] -14.53863 -14.03863 -14.43863 -14.53863 -14.63863 -14.03863 -14.13863
## [78] -14.63863 -14.23863 -14.83863 -14.83863 -14.53863 -14.53863 -14.43863
## [85] -14.93863 -14.33863 -14.13863 -14.43863 -14.73863 -15.13863 -14.73863
## [92] -14.83863 -14.43863 -14.33863 -14.13863 -14.53863 -14.33863 -14.13863
## [99] -13.93863
```

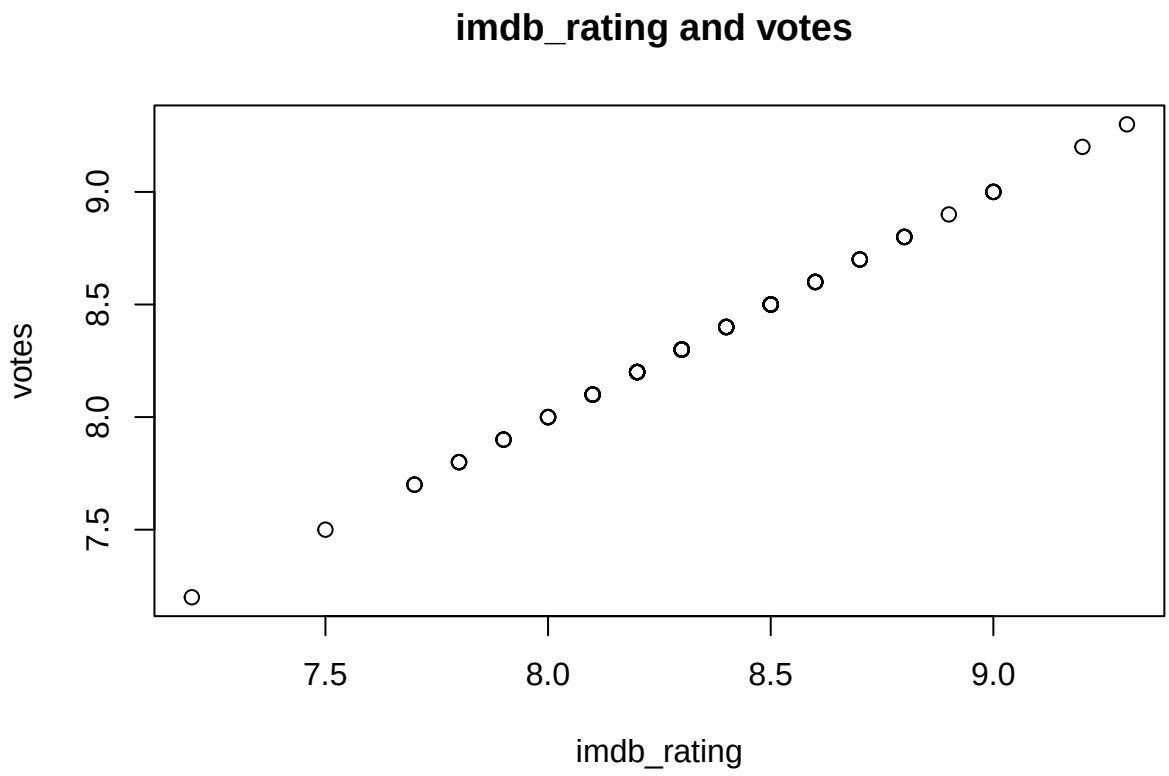
```
#Transformation of variables has been done above.
```

```
hist(vamshidataset$imdb_rating)
```




```
#The above graphical representation is a histogram.  The selected variable is the Elevation.
```

```
x <- vamshidataset$imdb_rating
y <- vamshidataset$imdb_rating
plot(x,y, main = "imdb_rating and votes ", xlab = "imdb_rating", ylab = "votes")
```




```
#The above graphical representation is a scatterplot.
#The selected variables are imdb_rating and votes
```