ML1

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```
GOT <- read.csv("character-deaths.csv")</pre>
```

Thi is the summary descriptive statistics where I identified the classification: chatagorial variables have character and quantitative have statistical summary of mean, meadian and mode.

summary(GOT)

```
##
        Name
                         Allegiances
                                                 Death.Year
                                                                Book.of.Death
##
    Length:917
                         Length:917
                                              Min.
                                                      :297.0
                                                                Min.
                                                                        :1.000
##
    Class : character
                         Class : character
                                               1st Qu.:299.0
                                                                1st Qu.:2.000
##
    Mode :character
                         Mode
                               :character
                                               Median :299.0
                                                                Median :3.000
##
                                              Mean
                                                      :299.2
                                                                Mean
                                                                        :2.928
##
                                               3rd Qu.:300.0
                                                                3rd Qu.:4.000
##
                                                      :300.0
                                                                        :5.000
                                              Max.
                                                                Max.
##
                                              NA's
                                                      :612
                                                                NA's
                                                                        :610
##
    Death.Chapter
                      Book.Intro.Chapter
                                                Gender
                                                                 Nobility
##
    Min.
            : 0.00
                      Min.
                              : 0.00
                                           Min.
                                                   :0.0000
                                                                      :0.0000
                                                              Min.
    1st Qu.:25.50
                      1st Qu.:11.00
                                           1st Qu.:1.0000
                                                              1st Qu.:0.0000
##
                                                              Median :0.0000
    Median :39.00
                      Median :27.00
                                           Median :1.0000
##
##
    Mean
            :40.07
                      Mean
                              :28.86
                                           Mean
                                                   :0.8288
                                                              Mean
                                                                      :0.4689
##
    3rd Qu.:57.00
                      3rd Qu.:43.00
                                           3rd Qu.:1.0000
                                                              3rd Qu.:1.0000
##
    Max.
            :80.00
                      Max.
                              :80.00
                                           Max.
                                                   :1.0000
                                                              Max.
                                                                      :1.0000
##
    NA's
            :618
                      NA's
                              :12
          GoT
##
                             CoK
                                                SoS
                                                                   FfC
##
    Min.
            :0.0000
                       Min.
                               :0.0000
                                          {\tt Min.}
                                                  :0.0000
                                                             Min.
                                                                     :0.0000
                       1st Qu.:0.0000
                                          1st Qu.:0.0000
##
    1st Qu.:0.0000
                                                             1st Qu.:0.0000
##
    Median :0.0000
                       Median :0.0000
                                          Median :0.0000
                                                             Median :0.0000
##
    Mean
            :0.2726
                       Mean
                               :0.3533
                                          Mean
                                                  :0.4242
                                                             Mean
                                                                     :0.2726
##
    3rd Qu.:1.0000
                       3rd Qu.:1.0000
                                          3rd Qu.:1.0000
                                                             3rd Qu.:1.0000
##
    Max.
            :1.0000
                       Max.
                               :1.0000
                                          Max.
                                                  :1.0000
                                                             Max.
                                                                     :1.0000
##
##
          DwD
##
    Min.
            :0.0000
##
    1st Qu.:0.0000
    Median :0.0000
##
            :0.2846
##
    Mean
##
    3rd Qu.:1.0000
##
    Max.
            :1.0000
##
```

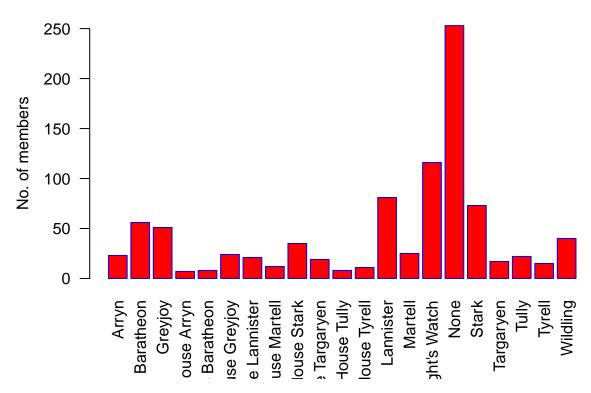
This Table shows the frequency of what characters of the show belonged to which royal family

FTable <- table(GOT\$Allegiances) FTable

```
##
##
                                                            House Arryn House Baratheon
              Arryn
                           Baratheon
                                               Greyjoy
##
                 23
                                   56
                                                    51
                                                            House Stark House Targaryen
##
     House Greyjoy House Lannister
                                        House Martell
                 24
                                                                      35
##
                                                    12
##
       House Tully
                        House Tyrell
                                             Lannister
                                                                Martell
                                                                           Night's Watch
##
                  8
                                   11
                                                    81
                                                                      25
                                                                                       116
##
               None
                               Stark
                                             Targaryen
                                                                   Tully
                                                                                   Tyrell
                253
                                   73
##
                                                    17
                                                                      22
                                                                                        15
##
           Wildling
##
```

This is a bar graph for all the families and their member count

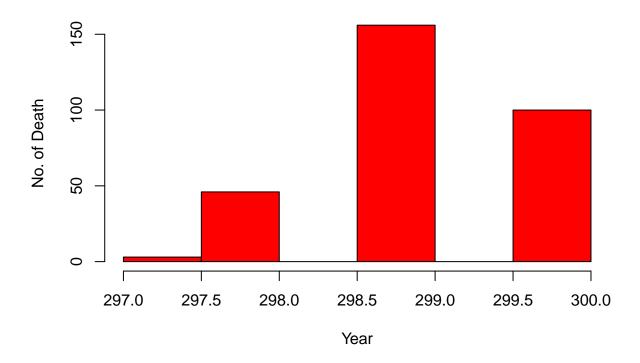
```
barplot(FTable, ylab="No. of members",col = "red", border = "blue", las = 2)
```



This is a quantitative stats. for all the characters and what year did they die in the show

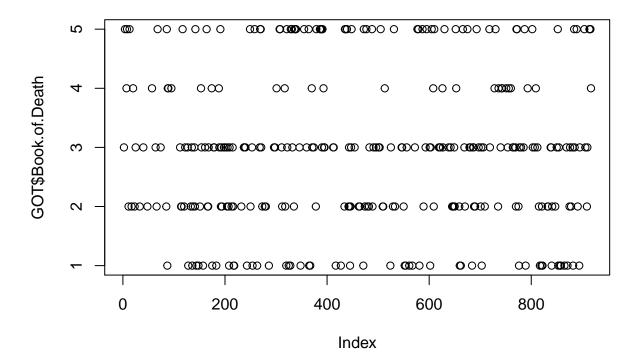
```
hist( GOT$Death.Year,,xlab = "Year", ylab="No. of Death",col = "Red", border = "black" )
```

Histogram of GOT\$Death.Year



This is a scatter plot command to show which book of the show did the characters died.

plot(GOT\$Book.of.Death)



Over here, I used the transform variable command and Since Game of Thrones started in year 297 as per the story timeline, the death year is 297 and onwards. I changed it to $\log 10$ which gave it the range from 1 to 10. Now the mean is 2.476 means on average, most deaths were in the first 25% of the show timeline.

```
summary(log10(GOT$Death.Year))
```

```
## Min. 1st Qu. Median Mean 3rd Qu. Max. NA's ## 2.473 2.476 2.476 2.476 2.477 2.477 612
```