Assigment1

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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:

setwd("C:/Users/Ananth/OneDrive/Documents/R/win-library/4.0/00LOCK")

setwd("C:/Users/Ananth/OneDrive/Desktop/MSBA Kent/Kent on campus employement/BA LAB/Lab 2")

I have used the data given by professor patuwo in Business Analytics lab sessions for the undegrad students

```
setwd("C:/Users/Ananth/OneDrive/Desktop/MSBA Kent/Kent on campus employement/BA LAB/Lab 2")
DS<-read.csv("FML.csv") # reading data into DS
DS # displays the content in the excel file</pre>
```

##		${\tt Sales_Rep}$	${\tt Business}$	Age	${\tt Female}$	${\tt Years}$	College	${\tt Personality}$	${\tt Certficates}$	Feedback
##	1	1	${\tt Hardware}$	59	1	2	Yes	Diplomat	1	2.01
##	2	2	${\tt Hardware}$	52	0	10	Yes	Diplomat	4	3.64
##	3	3	${\tt Software}$	47	1	1	Yes	Explorer	1	3.88
##	4	4	${\tt Hardware}$	61	0	2	Yes	Diplomat	3	2.70
##	5	5	${\tt Software}$	39	0	1	No	Diplomat	5	3.44
##	6	6	${\tt Hardware}$	28	0	6	Yes	Explorer	1	2.43
##	7	7	${\tt Software}$	25	1	1	Yes	Explorer	5	3.30
##	8	8	${\tt Hardware}$	51	1	10	No	Explorer	0	2.15
##	9	9	${\tt Hardware}$	34	0	4	Yes	Diplomat	2	2.91
##	10	10	${\tt Hardware}$	38	1	1	Yes	Explorer	5	1.23
##	11	11	${\tt Software}$	53	1	11	Yes	Explorer	2	3.93
##	12	12	${\tt Hardware}$	41	1	1	Yes	Sentinel	1	2.26
##	13	13	${\tt Hardware}$	40	0	1	No	Diplomat	4	3.60
##	14	14	${\tt Software}$	41	0	2	Yes	Explorer	3	2.17
##	15	15	${\tt Hardware}$	46	1	2	Yes	Analyst	1	4.00
##	16	16	${\tt Hardware}$	38	1	4	Yes	Diplomat	1	2.37
##	17	17	${\tt Software}$	39	0	2	No	Sentinel	2	3.00
##	18	18	${\tt Hardware}$	52	1	1	No	Sentinel	0	2.72
##	19	19	${\tt Software}$	54	1	2	Yes	Explorer	5	2.04
##	20	20	${\tt Hardware}$	24	0	1	Yes	Analyst	1	2.66
##	21	21	${\tt Software}$	53	0	1	Yes	Explorer	2	2.42
##	22	22	${\tt Hardware}$	37	1	1	Yes	Diplomat	2	3.71
##	23	23	${\tt Software}$	32	1	1	Yes	Explorer	3	3.42

```
##
      Salary NPS
## 1
      70200
               5
     133000
## 2
              10
      52600
## 3
               8
## 4
      96000
               6
## 5
    122000
               7
## 6
      60000
               6
      68000
## 7
               6
## 8
      43800
               5
## 9
      92000
               7
## 10 73400
               6
## 11 93400
               8
## 12 51800
               5
## 13 116000
## 14
     89000
               6
## 15
      61800
               5
## 16 57400
               4
## 17 57000
## 18 50600
## 19 90200
## 20 39000
               3
## 21
     75000
               6
## 22 96600
               9
## 23 61600
```

summary(DS) # descriptive statistics for the excel data

```
##
     Sales_Rep
                    Business
                                                         Female
                                          Age
##
   Min. : 1.0
                  Length:23
                                     Min.
                                            :24.00
                                                     Min.
                                                           :0.0000
   1st Qu.: 6.5
                  Class :character
                                     1st Qu.:37.50
                                                     1st Qu.:0.0000
  Median:12.0
                  Mode :character
                                     Median :41.00
                                                     Median :1.0000
         :12.0
                                           :42.78
##
   Mean
                                     Mean
                                                     Mean
                                                            :0.5652
##
   3rd Qu.:17.5
                                     3rd Qu.:52.00
                                                     3rd Qu.:1.0000
                                                           :1.0000
##
   Max.
          :23.0
                                            :61.00
                                                     Max.
                                     Max.
##
       Years
                      College
                                       Personality
                                                           Certficates
                    Length:23
##
  Min. : 1.000
                                       Length:23
                                                          Min.
                                                                 :0.000
   1st Qu.: 1.000
                    Class :character
                                       Class :character
                                                          1st Qu.:1.000
##
  Median : 2.000
                    Mode :character
                                       Mode :character
                                                          Median :2.000
   Mean : 2.957
                                                          Mean :2.348
   3rd Qu.: 3.000
##
                                                          3rd Qu.:3.500
          :11.000
##
   Max.
                                                          Max. :5.000
##
      Feedback
                       Salary
                                         NPS
          :1.230
                   Min. : 39000
                                    Min. : 3.000
  Min.
                   1st Qu.: 57200
  1st Qu.:2.315
                                    1st Qu.: 5.000
##
## Median :2.720
                   Median : 70200
                                    Median : 6.000
## Mean
          :2.869
                   Mean
                         : 76104
                                    Mean
                                          : 6.174
   3rd Qu.:3.520
                   3rd Qu.: 92700
                                    3rd Qu.: 7.500
## Max.
         :4.000
                   Max.
                          :133000
                                    Max.
                                          :10.000
```

summary(DS\$Salary) # descriptive statistics for the quantitative data Salary , \$ is used to access the

```
## Min. 1st Qu. Median Mean 3rd Qu. Max.
## 39000 57200 70200 76104 92700 133000
```

summary(log(DS\$Salary)) #data transformation using log function

```
##
      Min. 1st Qu. Median
                               Mean 3rd Qu.
##
     10.57
             10.95
                     11.16
                              11.19
                                      11.44
                                                11.80
Ftable <- table(DS$Personality) # personalities has categorical data
Ftable # displays the frequency of the category repeated in the personality & descriptive analysis of c
##
##
   Analyst Diplomat Explorer Sentinel
Btable <-table(DS$Business) # business is a categorical data
 \textbf{Btable} \textit{ \# displays the frequency of the category in \textit{Business column in excel sheet \& descriptive analysi} \\
##
## Hardware Software
         14
```





