Worksheet-3b in R

Instructions:

- Use RStudio or the RStudio Cloud accomplish this worksheet.

- Save the R script as *RWorksheet_lastname#3b.R*.
- On your own *GitHub repository*, push the R script, the Rmd file, as well as this pdf worksheet to the repo you have created before.
- Do not forget to comment your Git repo on our VLE
- Accomplish this worksheet by answering the questions being asked and writing the code manually.

1. Create a data frame using the table below.

Respondents	Sex	Fathers Occupation	Persons at Home	Siblings at school	Types of houses
1	2	1	5	6	1
2	2	3	7	4	2
3	1	3	3	4	3
4	2	3	8	1	1
5	2	1	5	2	1
6	2	2	9	1	3
7	2	3	6	5	3
8	2	1	7	3	1
9	2	1	8	1	2
10	2	1	4	2	3
11	1	3	7	3	2
12	2	2	5	2	3
13	2	1	4	5	2
14	2	3	7	5	2
15	2	3	8	2	3
16	2	1	8	1	3
17	2	3	3	2	3
18	2	1	11	5	3
19	1	2	7	3	3
20	2	1	6	2	2

Legend:

Male-1	Farmer-1	Wood-1
Female-2	Driver-2	Semi-Concrete-2
	Others-3	Concrete-3

| a. Write the codes.

```
Respondents <- c(seq(1,20))
Sex <- c(2,2,1,2,2,2,2,2,2,2,1,2,2,2,2,2,2,2,1,2)
FathersOccupation <- c(1,3,3,3,1,2,3,1,1,1,3,2,1,3,3,1,3,1,2,1)
Personsathome <- c(5,7,3,8,5,9,6,7,8,4,7,5,4,7,8,8,3,11,7,6)
Siblingsatschool <- c(6,4,4,1,2,1,5,3,1,2,3,2,5,5,2,1,2,5,3,2)
Typesofhouses <- c(1,2,3,1,1,3,3,1,2,3,2,3,2,2,3,3,3,3,3,2)

dframe <-
data.frame(Respondents,Sex,FathersOccupation,Personsathome,Siblingsatschool,Typesofhouses)
```

b. Describe the data. Get the structure or the summary of the data

```
summary(dframe)
```

c. Is the mean number of siblings attending is 5?

No

d. Extract the 1st two rows and then all the columns using the subsetting functions. Write the codes and its output.

```
c1 <- subset(dframe[1:2, 1:6, drop = FALSE])
c1
```

e. Extract 3rd and 5th row with 2nd and 4th column. Write the codes and its result.

```
c2 <- subset(dframe[c(3,5),c(2,4)])
c2
```

f. Select the variable types of houses then store the vector that results as types_houses. Write the codes.

```
c3 <- dframe[c(6)]
```

g. Select only all Males respondent that their father occupation was farmer. Write the codes and its output.

```
c22 <- subset(dframe[c(3,11),c(2,3)])
c22
```

h. Select only all females respondent that have greater than or equal to 5 number of siblings attending school. Write the codes and its outputs.

```
c5 <- subset(dframe[c(1:20), c(2,5)])
girla <- c5[dframe$Siblingsatschool >= 5,]
```

2. Write a R program to create an empty data frame. Using the following codes:

```
df = data.frame(Ints=integer(),
                Doubles=double(), Characters=character(),
                Logicals=logical(),
                Factors=factor(),
                stringsAsFactors=FALSE)

print("Structure of the empty dataframe:")
print(str(df))
```

   a. Describe the results.

It shows the 5 variables

3. Interpret the graph.

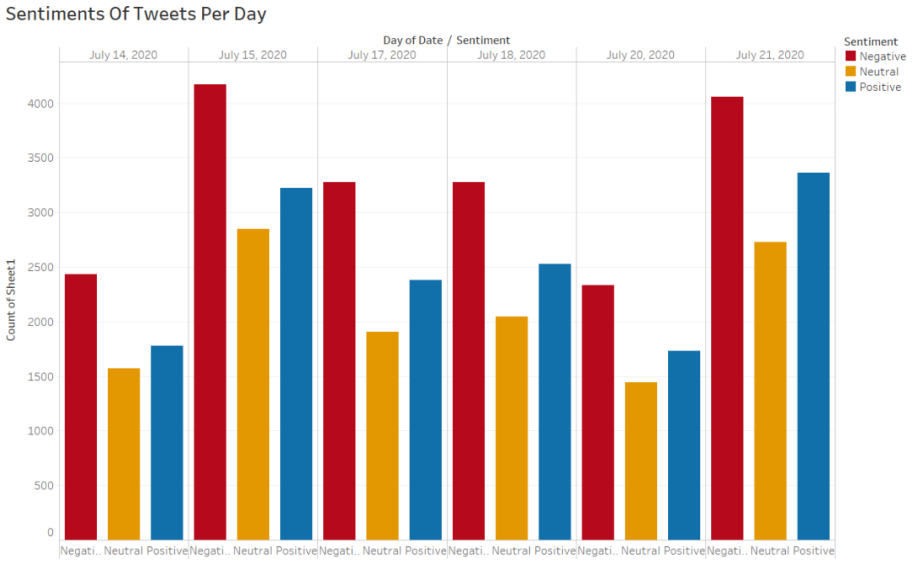

Figure 1: Sentiments of Tweets per day - Donald Trump