

Rworksheet#3b

Mamon, Jasmin Mae G.

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R Markdown

Worksheet for R Programming

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

a. Write the codes.

##	Respondents	Sex	Fathers_Occupation	Home	Sibling	Houses	
## 1	1	2		1	5	6	1
## 2	2	2		3	7	4	2
## 3	3	1		3	3	4	3
## 4	4	2		3	8	1	1
## 5	5	2		1	5	2	1
## 6	6	2		2	9	1	3
## 7	7	2		3	6	5	3
## 8	8	2		1	7	3	1
## 9	9	2		1	8	1	2
## 10	10	2		1	4	2	3
## 11	11	1		3	7	3	2
## 12	12	2		2	5	2	3
## 13	13	2		1	4	5	2
## 14	14	2		3	7	5	2
## 15	15	2		3	8	2	3
## 16	16	2		1	8	1	3
## 17	17	2		3	3	2	3
## 18	18	2		1	11	5	3
## 19	19	1		2	7	3	3
## 20	20	2		1	6	2	2

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

Answer: The data shows the total respondents, it's sex, their Father's occupation, how many persons they have at home, the total sibling they have at school, and the types of their houses.

```
## Respondents      Sex      Fathers_Occupation      Home
## Min.   : 1.00    Min.   :1.00    Min.   :1.00    Min.   : 3.0
## 1st Qu.: 5.75    1st Qu.:2.00    1st Qu.:1.00    1st Qu.: 5.0
## Median :10.50    Median :2.00    Median :2.00    Median : 7.0
## Mean   :10.50    Mean   :1.85    Mean   :1.95    Mean   : 6.4
## 3rd Qu.:15.25    3rd Qu.:2.00    3rd Qu.:3.00    3rd Qu.: 8.0
## Max.   :20.00    Max.   :2.00    Max.   :3.00    Max.   :11.0
## Sibling      Houses
## Min.   :1.00    Min.   :1.0
## 1st Qu.:2.00    1st Qu.:2.0
## Median :2.50    Median :2.5
## Mean   :2.95    Mean   :2.3
## 3rd Qu.:4.25    3rd Qu.:3.0
## Max.   :6.00    Max.   :3.0
```

c. Is the mean number of siblings attending is 5? Answer: No

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

```
## Respondents Sex Fathers_Occupation Home Sibling Houses
## 1          1  2              1    5          6          1
## 2          2  2              3    7          4          2
```

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

```
## Sex Home
## 3  1    3
## 5  2    5
```

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

```
## Houses
## 1      1
## 2      2
## 3      3
## 4      1
## 5      1
## 6      3
## 7      3
## 8      1
## 9      2
## 10     3
## 11     2
## 12     3
## 13     2
```

```
## 14      2
## 15      3
## 16      3
## 17      3
## 18      3
## 19      3
## 20      2
```

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

```
##      Sex Fathers_Occupation
## 3      1                  3
## 11     1                  3
## 19     1                  2
```

- 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.

```
##      Sex Sibling
## 1      2        6
## 7      2        5
## 13     2        5
## 14     2        5
## 18     2        5
```

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

```
df = data.frame(Ids=integer(),
                Doubles=double(), Characters=character(),
                Logicals=logical(),
                Factors=factor(),
                stringsAsFactors=FALSE)
print("Structure of the empty dataframe:")
```

```
## [1] "Structure of the empty dataframe:"
```

```
print(str(df))
```

```
## 'data.frame':    0 obs. of  5 variables:
## $ Ids      : int
## $ Doubles   : num
## $ Characters: chr
## $ Logicals  : logi
## $ Factors   : Factor w/ 0 levels:
## NULL
```

- a. Describe the results. Answer: It prints out an empty data frame that has zero(0) objects but has 5 variables with its equal 5 different classes.

3. Interpret the graph Sentiments of tweets Per Day

The data shows the sentiments of people about the former president of the US Donald Trump from July 14, 2020 to July 21, 2020. The red bar shows the negative, the orange shows the neutral and the blue shows the positive sentiment of tweets per day. The highest tweets per day is around 4000 plus on July 15, 2020 followed by July 21, 2020, it shows that people are active during that time.