RWorksheet 3b in R

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#1. Create a data frame using the table below.

#| a. Write the codes.

```
rspndts <- 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)
f_occup <- c(1, 3, 3, 3, 1, 2, 3, 1, 1, 1, 3, 2, 1, 3, 3,
             1, 3, 1, 2, 1)
p_home <- c(5, 7, 3, 8, 5, 9, 6, 7, 8, 4, 7, 5, 4, 7, 8, 8, 3,
            11, 7, 6)
s_sch <- c(6, 4, 4, 1, 2, 1, 5, 3, 1, 2, 3, 2, 5, 5, 2, 1,
           2, 5, 3, 2)
t_houses <- c(1, 2, 3, 1, 1, 3, 3, 1, 2, 3, 2, 3, 2, 2, 3, 3,
              3, 3, 3, 2)

df <- data.frame(rspndts, sex, f_occup, p_home, s_sch,
                     t_houses)
df
```

```
##    rspndts sex f_occup p_home s_sch t_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

```
summary(df)
```

```
##     rspndts           sex          f_occup         p_home         s_sch
##  Min.   : 1.00   Min.   :1.00   Min.   :1.00   Min.   : 3.0   Min.   :1.00
##  1st Qu.: 5.75   1st Qu.:2.00   1st Qu.:1.00   1st Qu.: 5.0   1st Qu.:2.00
##  Median :10.50   Median :2.00   Median :2.00   Median : 7.0   Median :2.50
##  Mean   :10.50   Mean   :1.85   Mean   :1.95   Mean   : 6.4   Mean   :2.95
##  3rd Qu.:15.25   3rd Qu.:2.00   3rd Qu.:3.00   3rd Qu.: 8.0   3rd Qu.:4.25
##  Max.   :20.00   Max.   :2.00   Max.   :3.00   Max.   :11.0   Max.   :6.00
##     t_houses
##  Min.   :1.0
##  1st Qu.:2.0
##  Median :2.5
##  Mean   :2.3
##  3rd Qu.:3.0
##  Max.   :3.0
```

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

```
##Answer: No, the mean number of siblings
##attending school is 2.95
```

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

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

```
##   rspndts sex f_occup p_home s_sch t_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.

```
ext1 <- subset(df[c(3,5), c(2,4)])
ext1
```

```
##   sex p_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.

```
Typesofhouses <- df$t_houses
Typesofhouses
```

```
##  [1] 1 2 3 1 1 3 3 1 2 3 2 3 2 2 3 3 3 3 3 2
```

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

```
frmr <- subset(df[c(1:20), c(2,3)])
frmr
```

```
##    sex f_occup
## 1    2       1
## 2    2       3
## 3    1       3
## 4    2       3
## 5    2       1
## 6    2       2
## 7    2       3
## 8    2       1
## 9    2       1
## 10   2       1
## 11   1       3
## 12   2       2
## 13   2       1
## 14   2       3
## 15   2       3
## 16   2       1
## 17   2       3
## 18   2       1
## 19   1       2
## 20   2       1
```

```
male <- frmr[df$f_occup == '1',]
male
```

```
##    sex f_occup
## 1    2       1
## 5    2       1
## 8    2       1
## 9    2       1
## 10   2       1
## 13   2       1
## 16   2       1
## 18   2       1
## 20   2       1
```

#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.

```
s_fml <- subset(df[c(1:20), c(2,5)])
s_fml
```

```
##    sex s_sch
## 1    2     6
```

```
## 2    2     4
## 3    1     4
## 4    2     1
## 5    2     2
## 6    2     1
## 7    2     5
## 8    2     3
## 9    2     1
## 10   2     2
## 11   1     3
## 12   2     2
## 13   2     5
## 14   2     5
## 15   2     2
## 16   2     1
## 17   2     2
## 18   2     5
## 19   1     3
## 20   2     2
```

```
fmale <- s_fml[df$s_sch >= '5',]
fmale
```

```
##    sex s_sch
## 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 (Ints = integer(), Doubles=double(), Characters = character(), Logicals=logical(), stringsAsFactors = FALSE)

print ("Structures of the empty dataframe:") print(str(df))

#a. Describe the results.

```
##The data frame has zero columns, 5 rows and zero level.
```

#3. Interpret the graph.

```
T_SentimentTwts <- print ("My interpretation of the graph that shows Donald Trump's daily sentiments in
```

```
## [1] "My interpretation of the graph that shows Donald Trump's daily sentiments in his tweets is that
```

```
T_SentimentTwts
```

```
## [1] "My interpretation of the graph that shows Donald Trump's daily sentiments in his tweets is that
```