RWorksheet_CAHUYA#3B

CAHUYA, CARLO J'NAED LYTON BSIT-2A

2022-11-24

1.Create a data frame using the table below.

    a. Write the codes.

```r
Table1 <- data.frame(
  Respondents = seq(1:20),
  Sex = rep(c(2,1,2,1,2,1,2),c(2,1,7,1,7,1,1)),
  Fathers_Occupation = c(1,3,3,3,1,2,3,1,1,1,3,2,1,3,3,1,3,1,2,1),
  Persons_Home = c(5,7,3,8,5,9,6,7,8,4,7,5,4,7,8,8,3,11,7,6),
  Siblings_School= c(6,4,4,1,2,1,5,3,1,2,3,2,5,5,2,1,2,5,3,2),
  Houses = c(1,2,3,1,1,3,3,1,2,3,2,3,2,2,3,3,3,3,3,2)
)
Table1
```

```
##    Respondents Sex Fathers_Occupation Persons_Home Siblings_School 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
```

```r
names(Table1) <- list("Respondents","Sex","Fathers Occupation","Persons at Home",
                      "Siblings at school","Types of houses")
Table1
```

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

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

```
#Sex, Respondents, Persons at Home, Types of Houses, Fathers Occupation, and Siblings in School displays
summary(Table1)
```

```
##   Respondents         Sex        Fathers Occupation Persons at 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
##   Siblings at school Types of 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?

```
# No it is not. 2.95 is the Mean of the number of siblings attending.
```

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

```
subset_1 <- subset(Table1[1:2,])
subset_1
```

```
##   Respondents Sex Fathers Occupation Persons at Home Siblings at school
## 1           1   2                  1               5                  6
## 2           2   2                  3               7                  4
##   Types of houses
## 1               1
## 2               2
```

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

```
subset_2 <- subset(Table1[c( 3, 5 ),c(2,4)])
subset_2
```

```
##   Sex Persons at 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.

```
types_houses <- c(Table1$`Types of houses`)
types_houses
```

```
##  [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.

```
Table2 <- data.frame(
  Respondents = seq(1:20),
  Sex = rep(c(2,1,2,1,2,1,2),c(2,1,7,1,7,1,1)),
  Fathers_Occupation = c(1,3,3,3,1,2,3,1,1,1,3,2,1,3,3,1,3,1,2,1),
  Persons_Home = c(5,7,3,8,5,9,6,7,8,4,7,5,4,7,8,8,3,11,7,6),
  Siblings_School= c(6,4,4,1,2,1,5,3,1,2,3,2,5,5,2,1,2,5,3,2),
  Houses = c(1,2,3,1,1,3,3,1,2,3,2,3,2,2,3,3,3,3,3,2)
)
Table2
```

```
##    Respondents Sex Fathers_Occupation Persons_Home Siblings_School 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
```

```
Male_Farm <- subset(Table2, Sex == '1' & Fathers_Occupation == '1')
Male_Farm_Names <- Male_Farm[c(2,3)]
Male_Farm_Names
```

```
## [1] Sex                Fathers_Occupation
## <0 rows> (or 0-length row.names)
```

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

```
Male_Farm2 <- subset(Table2,Sex == '2' & Siblings_School >= '5')
Male_Farm_Names2 <- Male_Farm2[c(2,5)]
Male_Farm_Names2
```

```
##     Sex Siblings_School
## 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(),
                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:
##  $ Ints      : int
##  $ Doubles   : num
##  $ Characters: chr
##  $ Logicals  : logi
##  $ Factors   : Factor w/ 0 levels:
## NULL
```

a. Describe the results.

```
# The output shows the internal structure of the 'df' data frame.
# It indicates that the data frame's structure is null or empty.
```

3. Interpret the graph.

```
# The chart illustrates that Donald Trump has far more negative tweet sentiments
# than positive tweet sentiments on a daily basis and there are also significantly
# less neutral sentiments compared to positive and negative tweets.
```