RWorksheet_Almayo#3B

Josh Christian Almayo

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R Markdown

1.

```
sex <- c(2, 2, 1, 2, 2, 2, 2, 2, 2, 2, 1, 2, 2, 2, 2, 2, 2, 2, 1, 2)
fathers_occupation <- c(1, 3, 3, 3, 1, 2, 3, 1, 1, 1, 3, 2, 1, 3, 3, 1, 3, 1, 2, 1)
persons_at_home <- c(5, 7, 3, 8, 5, 9, 6, 7, 8, 4, 7, 5, 4, 7, 8, 8, 3, 11, 7, 6)
siblings_at_school <- c(6, 4, 4, 1, 2, 1, 5, 3, 1, 2, 3, 2, 5, 5, 2, 1, 2, 5, 3, 2)
types_of_houses <-c(1, 2, 3, 1, 1, 3, 1, 2, 2, 3, 2, 3, 2, 2, 3, 3, 3, 3, 3, 2)

sex
```

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

```
fathers_occupation
```

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

```
persons_at_home
```

```
##  [1]  5  7  3  8  5  9  6  7  8  4  7  5  4  7  8  8  3 11  7  6
```

```
siblings_at_school
```

```
##  [1] 6 4 4 1 2 1 5 3 1 2 3 2 5 5 2 1 2 5 3 2
```

```
types_of_houses
```

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

```
df <- data.frame( sex, fathers_occupation, persons_at_home, siblings_at_school, types_of_houses)

df
```

```
##    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               1
## 8    2                  1               7                  3               2
## 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
```

```
mean_siblings <- mean(df$siblings_at_school)
mean_siblings
```

```
## [1] 2.95
```

\the mean number of siblings is 2.95

```
first_two_rows <- df[1:2,]
first_two_rows
```

```
##   sex fathers_occupation persons_at_home siblings_at_school types_of_houses
## 1   2                 1              5                 6              1
## 2   2                 3              7                 4              2
```

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

```
##   fathers_occupation siblings_at_school
## 3                  3                 4
## 5                  1                 2
```

```
types_of_houses <- (df$types_of_houses)
types_of_houses
```

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

```
male_farmer_respondents <- df[(df$Sex == 1) & (df$Fathers_Occupation == 1), ]
male_farmer_respondents
```

```
## [1] sex               fathers_occupation persons_at_home    siblings_at_school
## [5] types_of_houses
## <0 rows> (or 0-length row.names)
```

2.

```
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
```

\factros columns has 0 levels, indicating that no unique category in data.

3.

```
House_hold <- read.csv("/cloud/project/worksheet3/HouseholdData.csv")
House_hold
```

```
##    Respondents    Sex Fathers.Occupation Persons.at.Home Siblings.at.School
## 1            1   Male                 1               5                  2
## 2            2 Female                 2               7                  3
## 3            3 Female                 3               3                  0
## 4            4   Male                 3               8                  5
## 5            5   Male                 1               6                  2
## 6            6 Female                 2               4                  3
## 7            7 Female                 2               4                  1
## 8            8   Male                 3               2                  2
## 9            9 Female                 1              11                  6
## 10          10   Male                 3               6                  2
##    Types.of.Houses
## 1             Wood
## 2         Congrete
## 3         Congrete
## 4             Wood
## 5    Semi-Congrete
## 6    Semi-Congrete
## 7             Wood
## 8    Semi-Congrete
## 9    Semi-Congrete
## 10        Congrete
```

```
df$sex <- factor(df$sex)
df$sex <- as.integer(df$sex)
sex
```

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

```
df$types_of_houses <- factor(df$types_of_houses)
df4types_of_houses <- as.integer(df$types_of_houses)
types_of_houses
```

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

```
df$fathers_occupation <- factor(df$fathers_occupation)
fathers_occupation
```

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

\it shows number of fathers in a certain occupation.

```
female_driver_respondents <- df[(df$Sex == 2) & (df$Fathers_Occupation == 3),]
female_driver_respondents
```

```
## [1] Ints              Doubles           Characters        Logicals
## [5] Factors           sex               types_of_houses   fathers_occupation
## <0 rows> (or 0-length row.names)
```

\0 rows|1-7 of 9 columns

```
respondents_have_5_or_more_siblings <- df [(df$siblings_at_school >= 5)]
respondents_have_5_or_more_siblings
```

```
## data frame with 0 columns and 0 rows
```

4.

\The graph displays the quantity of tweets sent daily between July 14, 2020, and July 20, 2020, a span of seven days. The sentiment of the tweets is classified as either good, neutral, or negative. It shows that the sentiment is not consistent and varies from day to day.