RWorksheet_Francisco#3b

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```
#1.a
make_table <- data.frame(Respondent = c(1:20),Sex = c(2,2,1,2,2,2,2,2,2,2,1,2,2,2,2,2,2,2,1,2),Fathers_
make_table
```

```
##    Respondent Sex Fathers_Occupation PersonsAtHome SiblingsatSchool
## 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
##    TypesOfHouses
## 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
```

#Legend:Male=1 Farmer=1 Wood=1 # Female=2 Driver=2 Semi-Concrete=2 # Others=3 Concrete=3

```
#1.b
summary(make_table)
```

```
##    Respondent          Sex       Fathers_Occupation PersonsAtHome
##  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
##  SiblingsatSchool TypesOfHouses
##  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
```

```
#1.c: No, the mean is 2.95 based on summary
```

```
#1.d
access <- make_table[1:2,]
access
```

```
##   Respondent Sex Fathers_Occupation PersonsAtHome SiblingsatSchool
## 1          1   2                  1             5                6
## 2          2   2                  3             7                4
##   TypesOfHouses
## 1             1
## 2             2
```

```
#1.e
access2 <- make_table[c(3,5),c(2,4)]
access2
```

```
##   Sex PersonsAtHome
## 3   1             3
## 5   2             5
```

```
#1.f
types_houses <- make_table$TypesOfHouses
types_houses
```

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

```
#1.g
males_respondent <- subset(make_table, Sex == 1 & Fathers_Occupation == 1)
males_respondent
```

```
## [1] Respondent         Sex                Fathers_Occupation PersonsAtHome
## [5] SiblingsatSchool   TypesOfHouses
## <0 rows> (or 0-length row.names)
```

```r
#1.h
female_respondent <- subset(make_table, Sex == 2 & SiblingsatSchool >= 5)
female_respondent
```

```
##    Respondent Sex Fathers_Occupation PersonsAtHome SiblingsatSchool
## 1           1   2                  1             5                6
## 7           7   2                  3             6                5
## 13         13   2                  1             4                5
## 14         14   2                  3             7                5
## 18         18   2                  1            11                5
##    TypesOfHouses
## 1              1
## 7              3
## 13             2
## 14             2
## 18             3
```

```r
#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:"
```

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

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

```r
#2.a: It prints the datatype of the object and there's 0 levels
```

```r
#3.a
HousesData <- read.csv("/cloud/project/Worksheet#3/HouseholdData.csv")
HousesData
```

```
##    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
```

```
#3.b
HousesData$Sex <- factor(HousesData$Sex, levels = c("Male", "Female"), labels = c(1,2))
HousesData
```

```
##    Respondents Sex Fathers.Occupation Persons.at.Home Siblings.at.School
## 1            1   1                  1               5                  2
## 2            2   2                  2               7                  3
## 3            3   2                  3               3                  0
## 4            4   1                  3               8                  5
## 5            5   1                  1               6                  2
## 6            6   2                  2               4                  3
## 7            7   2                  2               4                  1
## 8            8   1                  3               2                  2
## 9            9   2                  1              11                  6
## 10          10   1                  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
```

```
#3.c
HousesData$Types.of.Houses <- factor(HousesData$Types.of.Houses, levels = c("Wood", "Congrete", "Semi-C
HousesData
```

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

```
## 3                2
## 4                1
## 5                3
## 6                3
## 7                1
## 8                3
## 9                3
## 10               2
```

```
#3.d
HousesData$Fathers.Occupation <- factor(HousesData$Fathers.Occupation, levels = c(1,2,3), label = c("Fa
HousesData
```

```
##    Respondents Sex Fathers.Occupation Persons.at.Home Siblings.at.School
## 1            1   1             Farmer               5                  2
## 2            2   2             Driver               7                  3
## 3            3   2             Others               3                  0
## 4            4   1             Others               8                  5
## 5            5   1             Farmer               6                  2
## 6            6   2             Driver               4                  3
## 7            7   2             Driver               4                  1
## 8            8   1             Others               2                  2
## 9            9   2             Farmer              11                  6
## 10          10   1             Others               6                  2
##    Types.of.Houses
## 1                1
## 2                2
## 3                2
## 4                1
## 5                3
## 6                3
## 7                1
## 8                3
## 9                3
## 10               2
```

```
#3.e
DriverDad <- subset(HousesData, Sex == 2 & Fathers.Occupation == "Driver")
DriverDad
```

```
##   Respondents Sex Fathers.Occupation Persons.at.Home Siblings.at.School
## 2           2   2             Driver               7                  3
## 6           6   2             Driver               4                  3
## 7           7   2             Driver               4                  1
##   Types.of.Houses
## 2               2
## 6               3
## 7               1
```

```
#3.f
siblings <- subset(HousesData, Respondents & Siblings.at.School >= 5)
siblings
```

```
##   Respondents Sex Fathers.Occupation Persons.at.Home Siblings.at.School
## 4           4   1             Others               8                  5
## 9           9   2             Farmer              11                  6
##   Types.of.Houses
```

```
## 4                1
## 9                3
```

```
#4
#. The graph represents the data of Sentiments of Tweets Per Day in the month of July. It show the diff
```