Work sheet #3b

Kenan Jake Jimenez

2025-10-13

1. Create a data frame using the table below.

a. Write the codes.

```
Respondents <- 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_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(1,2,3,1,1,3,3,1,2,3,2,3,2,2,3,3,3,3,3,2)

Sex <- factor(Sex,
              levels = c(1,2),
              labels = c("Male", "Female"))

Fathers_Occupation <- factor(Fathers_Occupation,
                             levels = c(1,2,3),
                             labels = c("Farmer", "Driver", "Others"))

Types_of_Houses <- factor(Types_of_Houses,
                          levels = c(1,2,3),
                          labels = c("Wood", "Semi-Concrete", "Concrete"))
df <- data.frame(
  Respondents,
  Sex,
  Fathers_Occupation,
  Persons_at_Home,
  Siblings_at_School,
  Types_of_Houses
)
df
```

```
##    Respondents    Sex Fathers_Occupation Persons_at_Home Siblings_at_School
## 1            1 Female             Farmer               5                  6
## 2            2 Female             Others               7                  4
## 3            3   Male             Others               3                  4
## 4            4 Female             Others               8                  1
## 5            5 Female             Farmer               5                  2
## 6            6 Female             Driver               9                  1
## 7            7 Female             Others               6                  5
## 8            8 Female             Farmer               7                  3
```

```
## 9            9 Female            Farmer               8                 1
## 10          10 Female            Farmer               4                 2
## 11          11   Male            Others               7                 3
## 12          12 Female            Driver               5                 2
## 13          13 Female            Farmer               4                 5
## 14          14 Female            Others               7                 5
## 15          15 Female            Others               8                 2
## 16          16 Female            Farmer               8                 1
## 17          17 Female            Others               3                 2
## 18          18 Female            Farmer              11                 5
## 19          19   Male            Driver               7                 3
## 20          20 Female            Farmer               6                 2
##    Types_of_Houses
## 1             Wood
## 2    Semi-Concrete
## 3         Concrete
## 4             Wood
## 5             Wood
## 6         Concrete
## 7         Concrete
## 8             Wood
## 9    Semi-Concrete
## 10        Concrete
## 11   Semi-Concrete
## 12        Concrete
## 13   Semi-Concrete
## 14   Semi-Concrete
## 15        Concrete
## 16        Concrete
## 17        Concrete
## 18        Concrete
## 19        Concrete
## 20   Semi-Concrete
```

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

```
str(df)
```

```
## 'data.frame':    20 obs. of  6 variables:
##  $ Respondents       : int  1 2 3 4 5 6 7 8 9 10 ...
##  $ Sex               : Factor w/ 2 levels "Male","Female": 2 2 1 2 2 2 2 2 2 2 ...
##  $ Fathers_Occupation: Factor w/ 3 levels "Farmer","Driver",..: 1 3 3 3 1 2 3 1 1 1 ...
##  $ Persons_at_Home   : num  5 7 3 8 5 9 6 7 8 4 ...
##  $ Siblings_at_School: num  6 4 4 1 2 1 5 3 1 2 ...
##  $ Types_of_Houses   : Factor w/ 3 levels "Wood","Semi-Concrete",..: 1 2 3 1 1 3 3 1 2 3 ...
```

```
summary(df)
```

```
##   Respondents        Sex     Fathers_Occupation Persons_at_Home
##  Min.   : 1.00   Male  : 3   Farmer:9           Min.   : 3.0
##  1st Qu.: 5.75   Female:17   Driver:3           1st Qu.: 5.0
##  Median :10.50               Others:8           Median : 7.0
```

```
##  Mean   :10.50                                    Mean   : 6.4
##  3rd Qu.:15.25                                    3rd Qu.: 8.0
##  Max.   :20.00                                    Max.   :11.0
##  Siblings_at_School      Types_of_Houses
##  Min.   :1.00       Wood         : 4
##  1st Qu.:2.00       Semi-Concrete: 6
##  Median :2.50       Concrete     :10
##  Mean   :2.95
##  3rd Qu.:4.25
##  Max.   :6.00
```