```
RChunk <- data.frame(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))
RChunk
```

```
##    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
```

```
str(RChunk)
```

```
## 'data.frame':    20 obs. of  6 variables:
```

```
##  $ Respondents       : int  1 2 3 4 5 6 7 8 9 10 ...
##  $ Sex               : num  2 2 1 2 2 2 2 2 2 2 ...
##  $ Fathers_Occupation: num  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   : num  1 2 3 1 1 3 3 1 2 3 ...
```

```
mean(RChunk[,5])
```

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

```
summary(RChunk)
```

```
##   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
```

```
RChunk[1:2, 1:6]
```

```
##   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
```

```
RChunk[3:5, 2:4]
```

```
##   Sex Fathers_Occupation Persons_at_Home
## 3   1                  3               3
## 4   2                  3               8
## 5   2                  1               5
```

```
types_houses <- RChunk[,6]
types_houses
```

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

```
MaFa <- subset(RChunk, Sex == 1 & Fathers_Occupation == 1, select = c("Sex", "Fathers_Occupation"))
MaFa
```

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

```
FeSi <- subset(RChunk, Sex==2 & Siblings_at_School>=5, select = c("Sex", "Siblings_at_School"))
FeSi
```

```
##    Sex Siblings_at_School
## 1    2                  6
## 7    2                  5
## 13   2                  5
## 14   2                  5
## 18   2                  5
```

#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
```

```
path <- "/Users/victo/OneDrive/Desktop/R/RWorksheet3/HouseholdData.csv"
HouseholdData <- read.csv(path)
HouseholdData
```

```
##    Responsdents    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
```

```
factor(HouseholdData[,2], levels = c("Male", "Female"), labels = c(1,2))
```

```
##  [1] 1 2 2 1 1 2 2 1 2 1
## Levels: 1 2
```

```
factor(HouseholdData[,6], levels = c("Wood", "Congrete", "Semi-congrete"), labels = c(1,2,3))
```

```
##  [1] 1 2 2 1 3 3 1 3 3 2
## Levels: 1 2 3
```

```
factor(HouseholdData[,3], levels = c(1,2,3), labels = c("Farmer", "Driver", "Others"))
```

```
##  [1] Farmer Driver Others Others Farmer Driver Driver Others Farmer Others
## Levels: Farmer Driver Others
```

```
subset(HouseholdData[c(2,3)], HouseholdData[,2] == 2 & HouseholdData[,3] == "Driver")
```

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

```
subset(HouseholdData, HouseholdData[,5] >= 5)
```

```
##   Responsdents    Sex Fathers.Occupation Persons.at.Home Siblings.at.School
## 4            4   Male                  3              8                  5
## 9            9 Female                  1             11                  6
##   Types.of.Houses
## 4            Wood
## 9   Semi-congrete
```

#4.Interpret the Graph #The image shows a bar chart with the sentiments of tweets per day. The chart shows the number of negative, neutral, and positive tweets each day from July 14th to July 21st. The chart shows that there were more negative tweets than positive or neutral tweets on most days.