RWorksheet_Animas#4a

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```
ShoeSize <- c(6.5,9.0,8.5,8.5,10.5,7.0,9.5,9.0,13.0,7.5,10.5,8.5,12.0,10.5,13.0,11.5,8.5,5.0,10.0,6.5,7
Height <- c(66.0,68.0,64.5,65.0,70.0,64.0,70.0,71.0,72.0,64.0,74.5,67.0,71.0,71.0,77.0,72.0,59.0,62.0,7
Gender <- c("F","F","F","F","M","F","F","F","M","F","M","F","M","M","M","M","F","F","M","F","F","M","M"
Household<-data.frame(ShoeSize,Height,Gender)
names(Household) <-c("Shoe size","Height","Gender")
Household
```

```
##    Shoe size Height Gender
## 1        6.5   66.0      F
## 2        9.0   68.0      F
## 3        8.5   64.5      F
## 4        8.5   65.0      F
## 5       10.5   70.0      M
## 6        7.0   64.0      F
## 7        9.5   70.0      F
## 8        9.0   71.0      F
## 9       13.0   72.0      M
## 10       7.5   64.0      F
## 11      10.5   74.5      M
## 12       8.5   67.0      F
## 13      12.0   71.0      M
## 14      10.5   71.0      M
## 15      13.0   77.0      M
## 16      11.5   72.0      M
## 17       8.5   59.0      F
## 18       5.0   62.0      F
## 19      10.0   72.0      M
## 20       6.5   66.0      F
## 21       7.5   64.0      F
## 22       8.5   67.0      M
## 23      10.5   73.0      M
## 24       8.5   69.0      F
## 25      10.5   72.0      M
## 26      11.0   70.0      M
## 27       9.0   69.0      M
## 28      13.0   70.0      M
```

```
#a.
```

#The table contains data on shoe sizes, heights, and genders for a group of individuals

```r
#b.
Males <- subset(Household, Gender == "M", select = c("Shoe size", "Height","Gender"))
Males
```

```
##    Shoe size Height Gender
## 5       10.5   70.0      M
## 9       13.0   72.0      M
## 11      10.5   74.5      M
## 13      12.0   71.0      M
## 14      10.5   71.0      M
## 15      13.0   77.0      M
## 16      11.5   72.0      M
## 19      10.0   72.0      M
## 22       8.5   67.0      M
## 23      10.5   73.0      M
## 25      10.5   72.0      M
## 26      11.0   70.0      M
## 27       9.0   69.0      M
## 28      13.0   70.0      M
```

```r
Females <- subset(Household, Gender == "F", select = c("Shoe size", "Height","Gender"))
Females
```

```
##    Shoe size Height Gender
## 1        6.5   66.0      F
## 2        9.0   68.0      F
## 3        8.5   64.5      F
## 4        8.5   65.0      F
## 6        7.0   64.0      F
## 7        9.5   70.0      F
## 8        9.0   71.0      F
## 10       7.5   64.0      F
## 12       8.5   67.0      F
## 17       8.5   59.0      F
## 18       5.0   62.0      F
## 20       6.5   66.0      F
## 21       7.5   64.0      F
## 24       8.5   69.0      F
```

```r
#c
MeanShoe <-mean(ShoeSize)
MeanShoe
```

```
## [1] 9.410714
```

```r
MeanHeight <-mean(Height)
MeanHeight
```

```
## [1] 68.57143
```

```r
#d
```

#Yes, there is likely a relationship between shoe size and height.Taller individuals tend to have larger feet, which means they usually wear larger shoe sizes.

```r
#2

months_vector<- c("March","April","January","November","January","September","October","September","Nov
factor_months_vector<-factor(months_vector)
factor_months_vector
```

```
##  [1] March     April     January   November  January   September October
##  [8] September November  August    January   November  November  February
## [15] May       August    July      December  August    August    September
## [22] November  February  April
## 11 Levels: April August December February January July March May ... September
```

```r
#3
SumMonths<-summary(months_vector)
SumMonths
```

```
##    Length     Class      Mode
##        24 character character
```

```r
SumFactor<-summary(factor_months_vector)
SumFactor
```

```
##     April    August  December  February   January      July     March       May
##         2         4         1         2         3         1         1         1
##  November   October September
##         5         1         3
```

```r
#4
direction<- c("East","West","North")
frequency<- c(1,4,3)

new_order_data <- factor(direction, levels = c("East","West","North"))
new_order_data
```

```
## [1] East  West  North
## Levels: East West North
```

```r
DirectFreq <- data.frame(Direction = direction, Frequency = frequency)
DirectFreq
```

```
##   Direction Frequency
## 1      East         1
## 2      West         4
## 3     North         3
```

```r
#5
#a
data <- read.table("import_march.csv", header = TRUE, sep = ",", stringsAsFactors = FALSE)

#b
data <- read.table("import_march.csv", header = TRUE, sep = ",", stringsAsFactors = FALSE)
data
```

```
##   Students Strategy.1 Strategy.2 Strategy.3
## 1     Male          8         10          8
## 2                   4          8          6
## 3                   0          6          4
## 4  Female          14          4         15
## 5                  10          2         12
## 6                   6          0          9
```