Worksheet#4 in R

Mark Lexter Sicabalo

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#Worksheet-4 in R
#Sicabalo, Mark Lexter BSIT 2-A

#1. The table below shows the data about shoe size and height. Create a data frame.
#a. Describe the data.
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
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, 71
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"

shoeclsf <- data.frame(Shoesize,Height,Gender)
shoeclsf
```

```
##    Shoesize 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
```

```
#b. Find the mean of shoe size and height of the respondents. Copy the codes and results.

summary(shoeclsf)
```

```
##     Shoesize          Height         Gender
##  Min.   : 5.000   Min.   :59.00   Length:28
##  1st Qu.: 8.500   1st Qu.:65.75   Class :character
##  Median : 9.000   Median :69.50   Mode  :character
##  Mean   : 9.411   Mean   :68.57
##  3rd Qu.:10.500   3rd Qu.:71.25
##  Max.   :13.000   Max.   :77.00
```

```
#Shoesize: Mean   : 9.411
#Height: Mean   :68.57

#c. Is there a relationship between shoe size and height? Why?
#Yes, because the higher the height of the person the bigger the shoesize is.
#The factors levels below the actual values.
```

```
#Factors
#2. Construct character vector months to a factor with factor() and assign the result to
#factor_months_vector. Print out factor_months_vector and assert that R prints out
#the factor levels below the actual values.

Months <- c("March","April","January","November","January",
            "September","October","September","November",
            "August","January","November","November",
            "February","May","August","July","December",
            "August","August","September","November","February","April")

factor_Months <- factor(Months)
factor_Months
```

```
##  [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
```

```
#3. Then check the summary() of the months_vector and factor_months_vector. |
#Interpret the results of both vectors. Are they both equally useful in this case?

summary(Months)
```

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

```
summary(factor_Months)
```

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

```
#Yes, it's because in summary of months it can identify the length, class, and mode of data Months.
#And also in summary of data factor_Months it identify how many months like arpil are in data.
```

```r
#4. Create a vector and factor for the table below.

factor_data <- c(1,4,3)

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

```
## [1] <NA> <NA> <NA>
## Levels: East West North
```

```r
#5. Enter the data below in Excel with file name = import_march.csv
#a. Import the excel file into the Environment Pane using read.table() function.
#Write the code.


library(readr)
import_march <- read_csv("/cloud/project/import_march.csv")
```

```
## Rows: 6 Columns: 4
## -- Column specification --------------------------------------------------------
## Delimiter: ","
## chr (1): Students
## dbl (3): Strategy 1, Strategy 2, Strategy 3
##
## i Use `spec()` to retrieve the full column specification for this data.
## i Specify the column types or set `show_col_types = FALSE` to quiet this message.
```

```r
View(import_march)
```

```
## Warning in View(import_march): unable to open display
```

```
## Error in .External2(C_dataviewer, x, title): unable to start data viewer
```

```r
import_file <- read.table("/cloud/project/import_march.csv",header = TRUE, sep = ',')
import_file
```

```
##   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
```

```r
#b. View the dataset. Write the code and its result.

View(import_march)
```

```
## Warning in View(import_march): unable to open display
```

```
## Error in .External2(C_dataviewer, x, title): unable to start data viewer
```