WORKSHEET -4

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12/6/2022

1.

```
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)
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)
Gender <- c("F","F","F","F","M","F","F","F","M","F","M","F","M","M")
Shoe_size <- c(13.0,11.5,8.5,5.0,10.0,6.5,7.5,8.5,10.5,8.5,10.5,11.0,9.0,13.0)
Height_ <- c(77.0,72.0,59.0,62.0,72.0,66.0,64.0,67.0,73.0,69.0,72.0,70.0,69.0,70.0)
Gender_ <- c("M","M","F","F","M","F","F","M","M","F","M","M","M","M")
```

```
dframe <- data.frame(Shoesize, Height, Gender, Shoe_size, Height_, Gender_)
dframe
```

```
##    Shoesize Height Gender Shoe_size Height_ Gender_
## 1       6.5   66.0      F      13.0      77       M
## 2       9.0   68.0      F      11.5      72       M
## 3       8.5   64.5      F       8.5      59       F
## 4       8.5   65.0      F       5.0      62       F
## 5      10.5   70.0      M      10.0      72       M
## 6       7.0   64.0      F       6.5      66       F
## 7       9.5   70.0      F       7.5      64       F
## 8       9.0   71.0      F       8.5      67       M
## 9      13.0   72.0      M      10.5      73       M
## 10      7.5   64.0      F       8.5      69       F
## 11     10.5   74.5      M      10.5      72       M
## 12      8.5   67.0      F      11.0      70       M
## 13     12.0   71.0      M       9.0      69       M
## 14     10.5   71.0      M      13.0      70       M
```

a.Describe the data. - The data shows the different shoe size among male and female in different height

b.

```
mean1 <- mean(Shoesize)
mean1
```

```
## [1] 9.321429
```

```
mean2 <- mean(Shoe_size)
mean2
```

```
## [1] 9.5
```

```
result1 <- c(mean1, mean2)
result1
```

```
## [1] 9.321429 9.500000
```

```
shoemean <- mean(result1)
shoemean
```

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

```
mean3 <- mean(Height)
mean3
```

```
## [1] 68.42857
```

```
mean4 <- mean(Height_)
mean4
```

```
## [1] 68.71429
```

```
result2 <- c(mean3, mean4)
result2
```

```
## [1] 68.42857 68.71429
```

```
heightmean <- mean(result2)
heightmean
```

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

c.

```
gtm <- mean(c(shoemean, heightmean))
gtm
```

```
## [1] 38.99107
```

Yes, there is a relationship between shoe size and height, the shoe sizes is big when the respondents is also tall. If the height of the respondents is below 70.0 their shoe size will be small. FACTORS

```
months_vector <- c("March","April","January","November","January","September","October","September","No
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
```

3.

```
smry <- summary(months_vector)
smry
```

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

```
smry2 <- summary(factor_months_vector)
smry2
```

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

4.

```
factor_data <- c("East" = '1', "West" = '4', "North" = '3')
factor_data
```

```
##  East  West North
##   "1"   "4"   "3"
```

```
new_order_data <- factor(factor_data,levels = c("East" = '1', "West" = '4', "North" = '3'))
print(new_order_data)
```

```
##  East  West North
##     1     4     3
## Levels: 1 4 3
```

5.

```
import <- read.table("import_march.csv", header= TRUE, sep= ",")
import
```

```
##   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
```

```
getwd()
```

```
## [1] "D:/BSIT2A-CS101/Macarobo_Repo/WORKSHEET -4"
```