# RWorksheet_Llanera#4a

LlaneraExerRepo

2024-10-30

1.

A.

```r
shoe_size <- c(8, 9, 10, 6, 7)
height <- c(170, 180, 175, 160, 165)
gender <- c("M", "M", "M", "F", "F")

data <- data.frame(ShoeSize = shoe_size, Height = height, Gender = gender)
print(data)
```

```
##   ShoeSize Height Gender
## 1        8    170      M
## 2        9    180      M
## 3       10    175      M
## 4        6    160      F
## 5        7    165      F
```

B.

```r
male_data <- subset(data, Gender == "M")
female_data <- subset(data, Gender == "F")

print(male_data)
```

```
##   ShoeSize Height Gender
## 1        8    170      M
## 2        9    180      M
## 3       10    175      M
```

```r
print(female_data)
```

```
##   ShoeSize Height Gender
## 4        6    160      F
## 5        7    165      F
```

C.

```r
# c
mean_shoe_size <- mean(data$ShoeSize)
mean_height <- mean(data$Height)

print(paste("Mean Shoe Size:", mean_shoe_size))
```
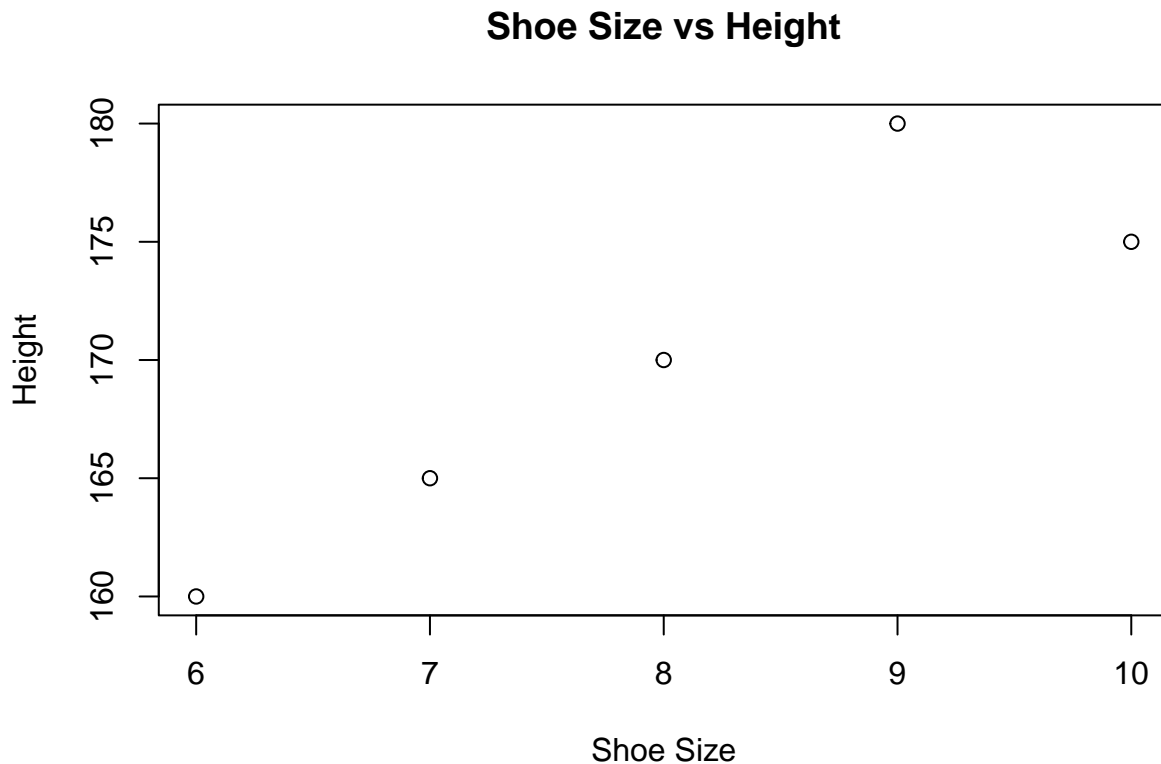
```
## [1] "Mean Shoe Size: 8"
```

```r
print(paste("Mean Height:", mean_height))
```

```
## [1] "Mean Height: 170"
```

D.

```
plot(data$ShoeSize, data$Height, main="Shoe Size vs Height", xlab="Shoe Size", ylab="Height")
```

**Shoe Size vs Height**



2.

```
monthsVector <- 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")


factorMonthsVector <- factor(monthsVector)
print(factorMonthsVector)
```

```
##  [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.

```
direction <- c("East", "West", "North", "West", "North")
frequency <- c(1, 4, 3, 2, 1)

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

```
## [1] East  West  North West  North
## Levels: East West North
```
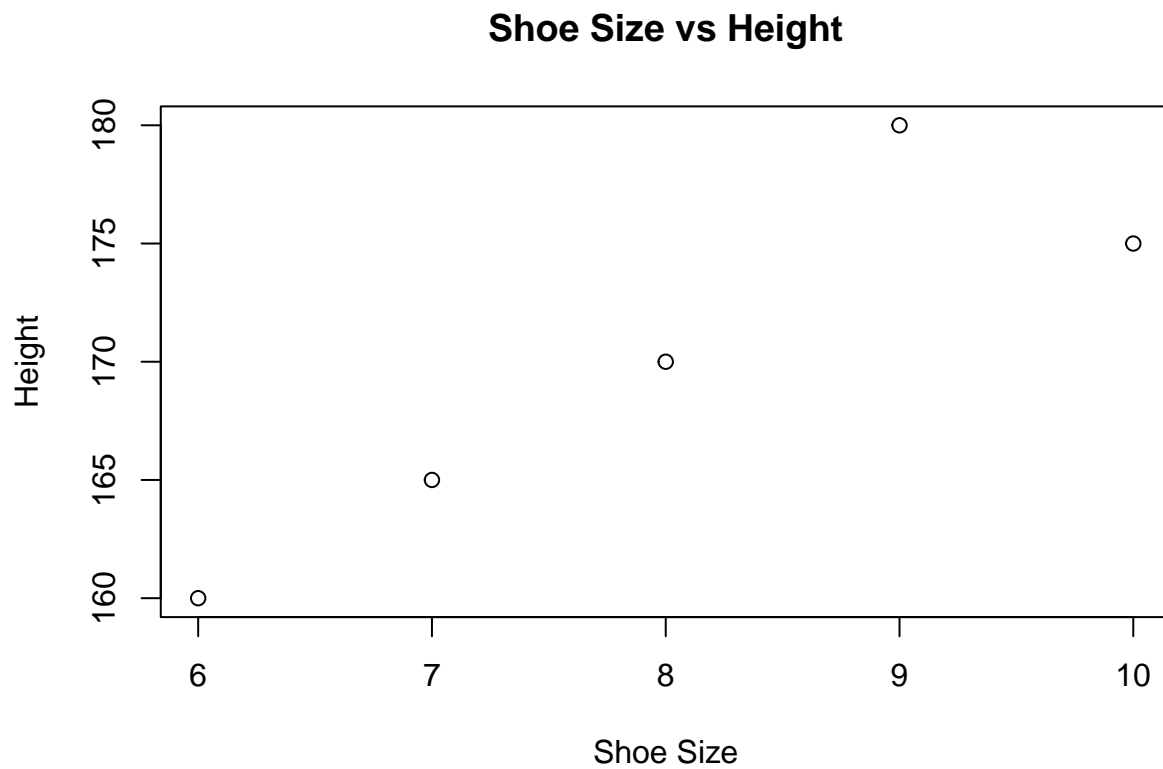
4.

```
factor_data <- c("East", "West", "North")
frequency_vector <- c(1, 4, 3)
new_order_data <- factor(factor_data,levels = c("East","West","North"))
print(new_order_data)
```
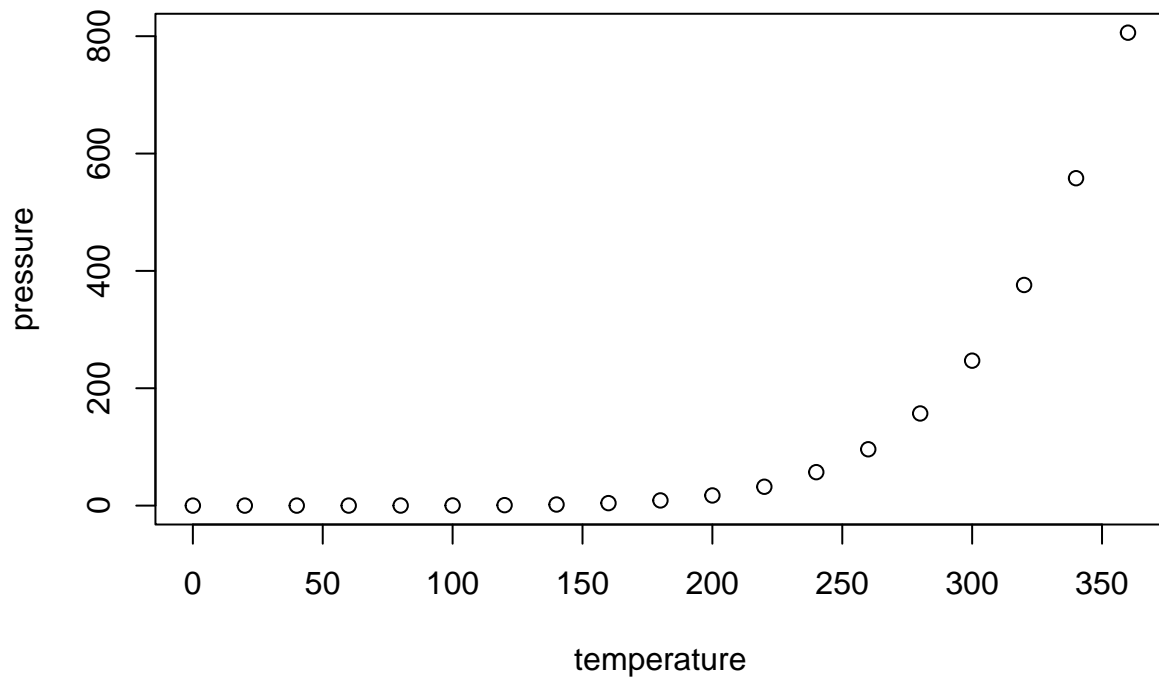
```
## [1] East  West  North
## Levels: East West North
```

```
plot(data$ShoeSize, data$Height, main="Shoe Size vs Height", xlab="Shoe Size", ylab="Height")
```

**Shoe Size vs Height**



## Including Plots

You can also embed plots, for example:

Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.