

Soluciones del Cuarto Laboratorio

Bioestadística 2020

Ejercicio 1

```
rownames(mtcars[(mtcars$cyl == 6) & (mtcars$carb == 4), ])
```

```
## [1] "Mazda RX4"      "Mazda RX4 Wag"  "Merc 280"      "Merc 280C"
```

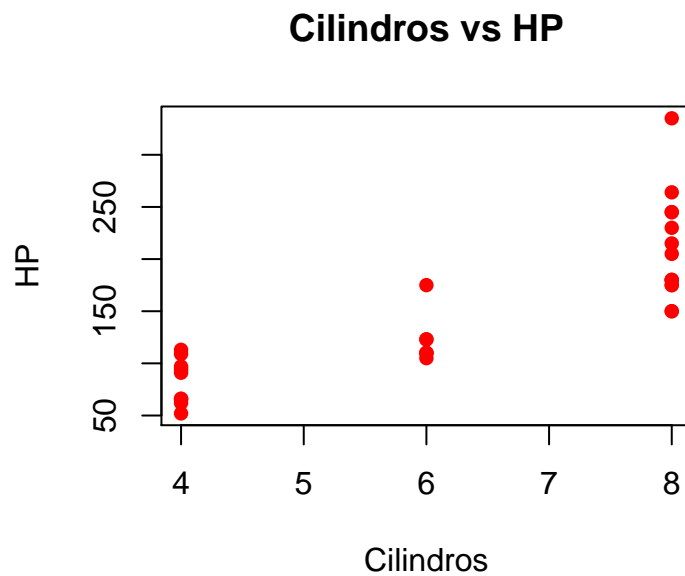
Ejercicio 2

```
mtcars_sel = mtcars[mtcars$cyl == 6, ]  
mean(mtcars_sel$hp)
```

```
## [1] 122.2857
```

Ejercicio 3

```
plot(mtcars$cyl, mtcars$hp, xlab = "Cilindros", ylab = "HP", main = "Cilindros vs HP", pch = 16, col = "red")
```



El resto de los gráficos son análogos.

Ejercicio 4

```
dataFrame = read.table("dataFrame.csv", header = TRUE, sep = ";", quote = "\"", dec = ",")  
head(dataFrame)
```

```
##   Variable1  Variable2  Variable3  Variable4  Variable5  
## 1 -2.3792508 -0.09068671  1.0418337  0.5955888  1.1041083  
## 2 -0.3524653  1.78614999  0.4212302 -0.7542450  0.9770403  
## 3 -0.5704239  0.07109230  1.9781779 -0.1190066 -1.0610734  
## 4  1.1280665  1.68580364 -0.1666259  0.4441527 -1.3632210  
## 5  0.4141980 -0.55601871 -1.0303259  0.3691851 -0.2008154  
## 6 -2.2981413  1.51076577 -0.2467763  0.1937391  0.3650947
```

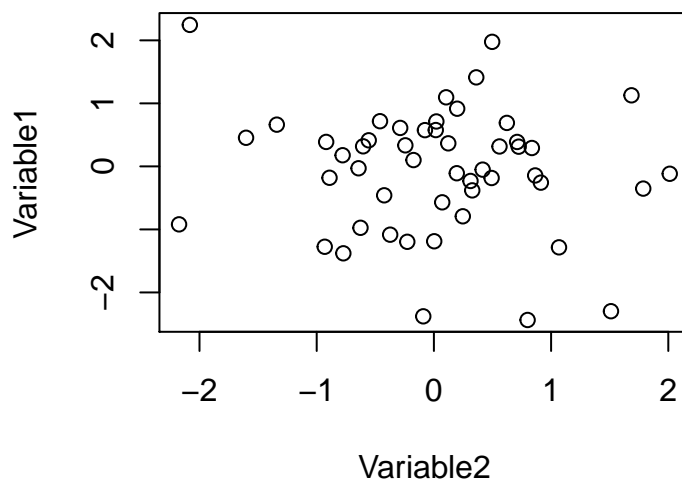
```
summary(dataFrame)
```

```
## Variable1 Variable2 Variable3
## Min. :-2.43737 Min. :-2.17430 Min. :-1.7440
## 1st Qu.: -0.54255 1st Qu.: -0.53196 1st Qu.: -0.4194
## Median : 0.03527 Median : 0.04603 Median : -0.1376
## Mean :-0.06191 Mean : 0.02393 Mean : 0.1296
## 3rd Qu.: 0.54501 3rd Qu.: 0.54400 3rd Qu.: 0.7998
## Max. : 2.24565 Max. : 2.01229 Max. : 2.0235
## Variable4 Variable5
## Min. :-1.75364 Min. :-2.157754
## 1st Qu.: -0.55360 1st Qu.: -0.508597
## Median : -0.11827 Median : 0.008493
## Mean :-0.02521 Mean : 0.155815
## 3rd Qu.: 0.47562 3rd Qu.: 0.975960
## Max. : 2.03585 Max. : 2.032209
```

```
str(dataFrame)
```

```
## 'data.frame': 50 obs. of 5 variables:
## $ Variable1: num -2.379 -0.352 -0.57 1.128 0.414 ...
## $ Variable2: num -0.0907 1.7861 0.0711 1.6858 -0.556 ...
## $ Variable3: num 1.042 0.421 1.978 -0.167 -1.03 ...
## $ Variable4: num 0.596 -0.754 -0.119 0.444 0.369 ...
## $ Variable5: num 1.104 0.977 -1.061 -1.363 -0.201 ...
```

```
plot(dataFrame$Variable2,dataFrame$Variable1,xlab='Variable2',ylab='Variable1')
```



Ejercicio 5

```
m = matrix(runif(100*5), ncol = 5)
write.table(m, "ej5.csv", col.names = FALSE, row.names = FALSE, sep = ",")
```