

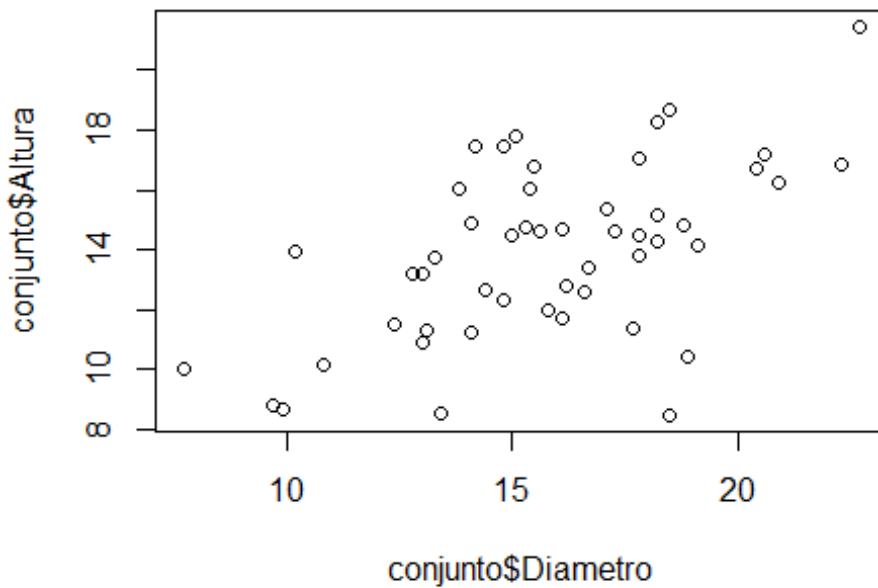
## Ejercicio\_clase.R

Usuario

2021-03-18

```
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# Ejercicio en clase  
# 18.03.2021
```

```
conjunto <-  
read.csv("https://raw.githubusercontent.com/Marimari02/PrincipiosEstadistica2021/main/cuadro1.csv", header = TRUE)  
  
plot(conjunto$Diametro, conjunto$Altura)
```



```
cor.test(conjunto$Diametro, conjunto$Altura)  
  
##  
## Pearson's product-moment correlation  
##  
## data: conjunto$Diametro and conjunto$Altura  
## t = 4.7755, df = 48, p-value = 1.724e-05  
## alternative hypothesis: true correlation is not equal to 0
```

```
## 95 percent confidence interval:
## 0.3434347 0.7304827
## sample estimates:
##      cor
## 0.5675298

data("iris")

head(iris)

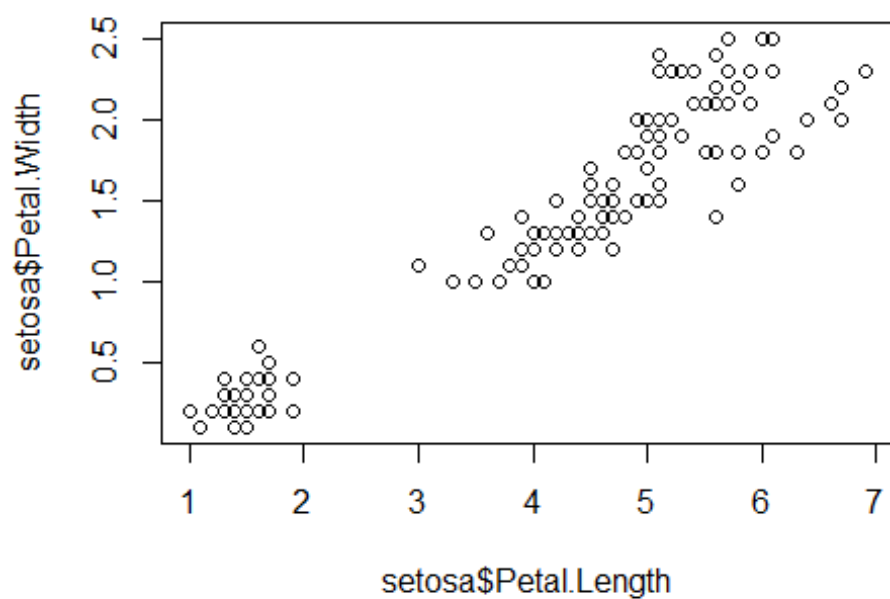
##   Sepal.Length Sepal.Width Petal.Length Petal.Width Species
## 1          5.1         3.5          1.4          0.2  setosa
## 2          4.9         3.0          1.4          0.2  setosa
## 3          4.7         3.2          1.3          0.2  setosa
## 4          4.6         3.1          1.5          0.2  setosa
## 5          5.0         3.6          1.4          0.2  setosa
## 6          5.4         3.9          1.7          0.4  setosa

summary(iris)

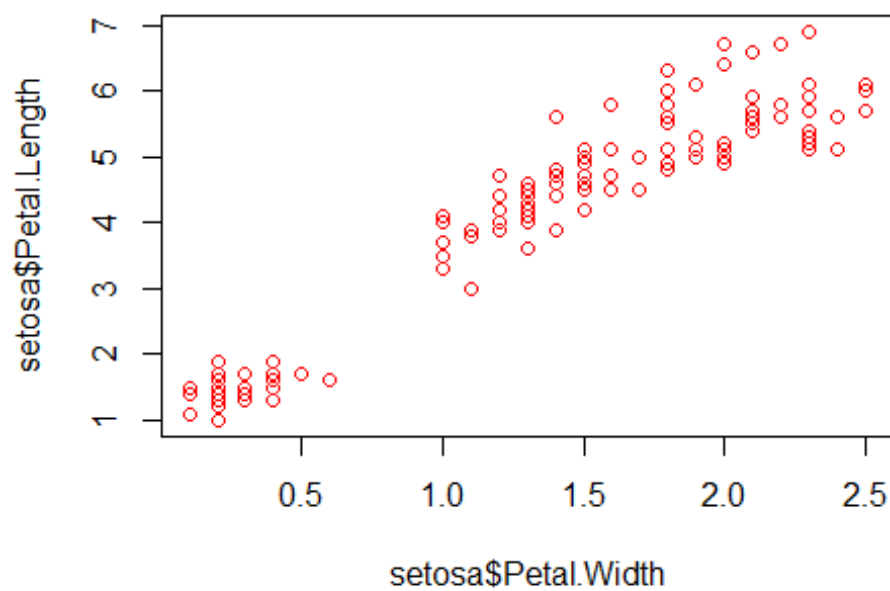
##   Sepal.Length   Sepal.Width   Petal.Length   Petal.Width
## Min.   :4.300   Min.   :2.000   Min.   :1.000   Min.   :0.100
## 1st Qu.:5.100   1st Qu.:2.800   1st Qu.:1.600   1st Qu.:0.300
## Median :5.800   Median :3.000   Median :4.350   Median :1.300
## Mean   :5.843   Mean   :3.057   Mean   :3.758   Mean   :1.199
## 3rd Qu.:6.400   3rd Qu.:3.300   3rd Qu.:5.100   3rd Qu.:1.800
## Max.   :7.900   Max.   :4.400   Max.   :6.900   Max.   :2.500
##      Species
## setosa    :50
## versicolor:50
## virginica :50
##
##
##

setosa <- subset(iris, Sspecies = "setosa")

plot(setosa$Petal.Length, setosa$Petal.Width)
```



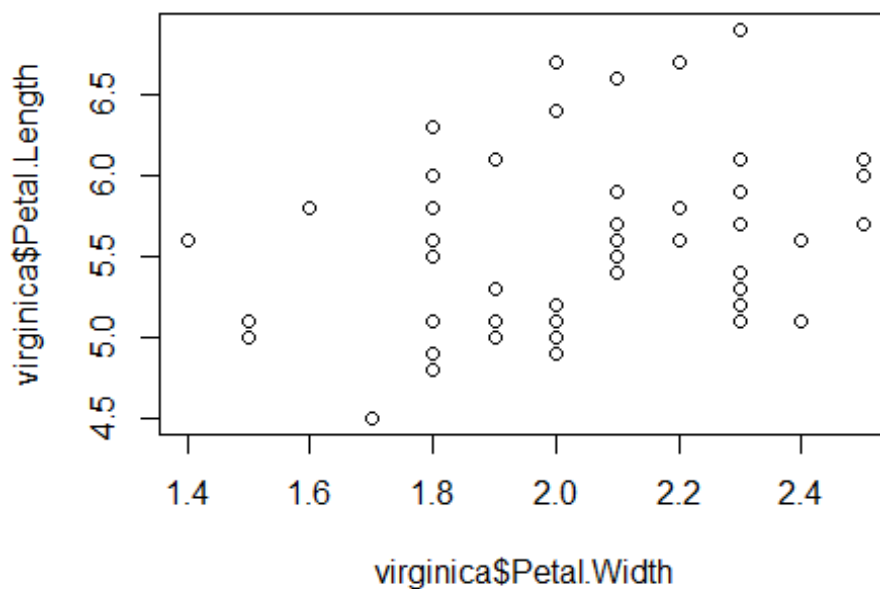
```
plot(setosa$Petal.Width, setosa$Petal.Length, col="red")
```



```
cor.test(setosa$Petal.Length, setosa$Petal.Width)
```

```
##
## Pearson's product-moment correlation
##
## data: setosa$Petal.Length and setosa$Petal.Width
## t = 43.387, df = 148, p-value < 2.2e-16
## alternative hypothesis: true correlation is not equal to 0
## 95 percent confidence interval:
## 0.9490525 0.9729853
## sample estimates:
## cor
## 0.9628654

virginica <- subset(iris, Species == "virginica")
plot(virginica$Petal.Width, virginica$Petal.Length)
```

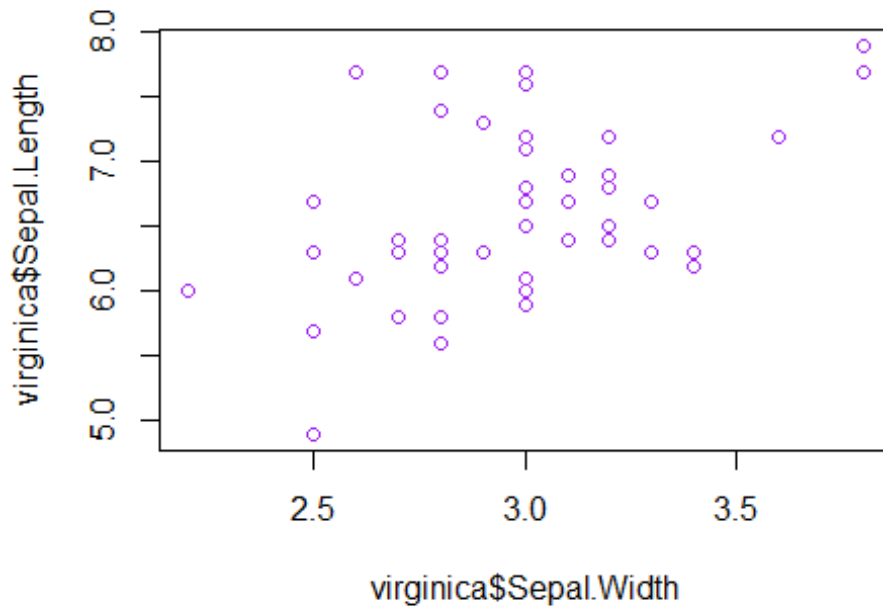


```
cor.test(virginica$Petal.Width, virginica$Petal.Length)

##
## Pearson's product-moment correlation
##
## data: virginica$Petal.Width and virginica$Petal.Length
## t = 2.3573, df = 48, p-value = 0.02254
## alternative hypothesis: true correlation is not equal to 0
## 95 percent confidence interval:
## 0.0480704 0.5510499
## sample estimates:
```

```
##      cor
## 0.3221082

plot(virginica$Sepal.Width, virginica$Sepal.Length, col="purple")
```



```
cor.test(virginica$Sepal.Length, virginica$Sepal.Width)

##
## Pearson's product-moment correlation
##
## data: virginica$Sepal.Length and virginica$Sepal.Width
## t = 3.5619, df = 48, p-value = 0.0008435
## alternative hypothesis: true correlation is not equal to 0
## 95 percent confidence interval:
##  0.2049657 0.6525292
## sample estimates:
##      cor
## 0.4572278
```