#### lab3.R

hp

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```
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DBH 1 <-
read.csv("https://raw.githubusercontent.com/Andrea1515/PrincipiosEstadist
ica2021/main/cuadro1.csv")
Conjunto <-
read.csv("https://raw.githubusercontent.com/Andrea1515/PrincipiosEstadist
ica2021/main/cuadro1.csv")
head(Conjunto)
##
     Arbol Fecha Especie Posicion Vecinos Diametros Altura
## 1
         1
              12
                       F
                                C
                                        4
                                                15.3
                                                      14.78
## 2
         2
              12
                       F
                                D
                                        3
                                                17.8 17.07
               9
                       C
                                D
                                        5
## 3
         3
                                                18.2 18.28
               9
                                S
## 4
         4
                       Н
                                        4
                                                 9.7
                                                       8.79
## 5
         5
               7
                                Ι
                       Н
                                        6
                                                10.8 10.18
                       C
## 6
                                Ι
                                        3
                                                14.1 14.90
         6
              10
# Altura
Altura <- c(14.78, 17.07, 18.28, 8.79, 10.18, 14.9, 15.34, 17.22, 15.15,
14.66, 17.43, 17.45, 14.18, 13.4,10.4, 11.52, 14.61, 21.46, 17.82, 11.38,
8.5, 12.8, 18.71, 14.48, 14.81, 12.01, 11.7, 16.03, 14.46, 8.47, 11.22,
12.34, 16.79, 16.06, 13.2, 14.3, 16.84, 13.84, 11.31, 13.2, 13.75, 14.6,
12.56, 10.88, 13.93, 12.68, 10, 8.69, 16.73, 16.25)
mean(Altura)
## [1] 13.9432
H.media <- subset(Altura, DBH 1 <= 13.9432)
H.16 <- subset(Altura, DBH_1 < 16.5)
# Vecinos
Vecinos <- c(4, 3, 5, 4, 6, 3, 2, 2, 4, 5, 3, 6, 2, 2, 4, 3, 0, 1, 4, 3,
5, 4, 1, 4, 2, 4, 3, 3, 0, 1, 3, 5, 4, 6, 4, 2, 0, 3, 4, 6, 3, 3, 4, 5,
4, 3, 6, 5, 1, 3)
Vecinos3 <- subset(Vecinos, DBH 1 <=3)</pre>
Vecinos4 <- subset(Vecinos, DBH_1 > 4)
# Diametro
Diametro <- c(15.3, 17.8, 18.2, 9.7, 10.8, 14.1, 17.1, 20.6, 18.2, 16.1,
14.2, 14.8, 19.1, 16.7, 18.9, 12.4, 17.3, 22.7, 15.1, 17.7, 13.4, 16.2,
18.5, 15, 18.8, 15.8, 16.1, 15.4, 17.8, 18.5, 14.1, 14.8, 15.5, 13.8, 13,
18.2, 22.3, 17.8, 13.1, 12.8, 13.3, 15.6, 16.6, 13, 10.2, 14.4, 7.7, 9.9,
```

```
20.4, 20.9)
mean(Diametro)

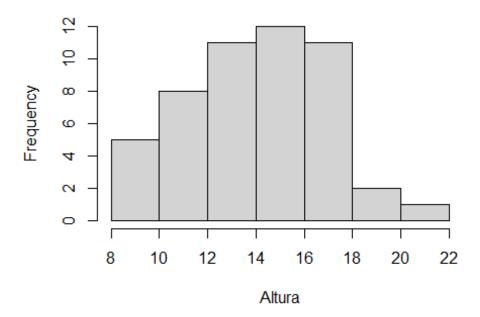
## [1] 15.794

DBHmedia <- subset(Diametro, DBH_1 <15.794)
DBH16 <- subset(Diametro, DBH_1 > 16)

#Especie
Especie <- c("F, F, C, H, H, C, C, C, F, F, H, H, F, C, C, H, H, F, C, C, C, C, F, F, F, H, H, C, C, C, C, F, F, F, H, H, C, C, C, F, F, F, H, H, H, C, C, C, F, C, C, F, C, C, H, H")
Especie <- subset(Especie, DBH_1 <= 16.9)
Especie <- subset(Especie, DBH_1 > 18.5)

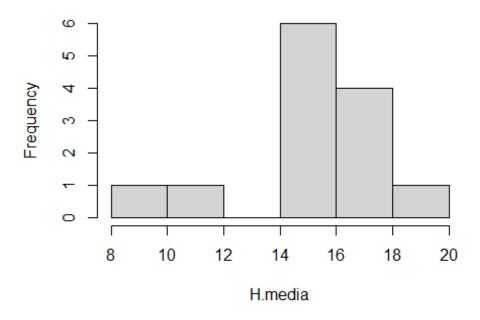
#Visualizacion de datos
hist(Altura)
```

#### **Histogram of Altura**



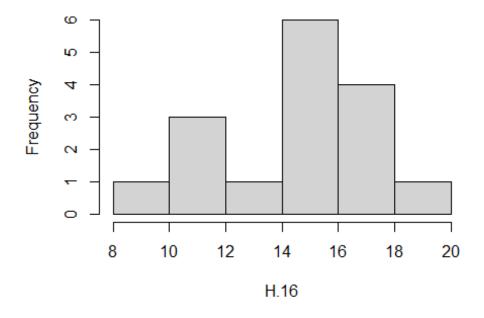
hist(H.media)

# Histogram of H.media



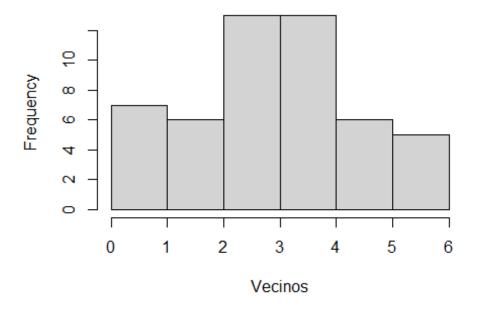
hist(H.16)

## Histogram of H.16



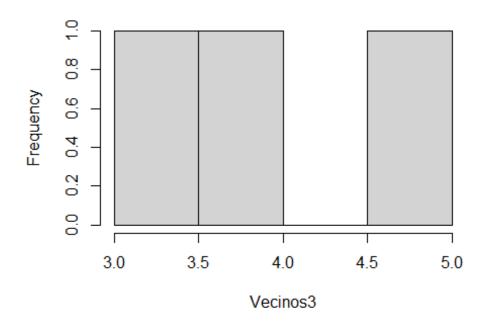
hist(Vecinos)

## **Histogram of Vecinos**



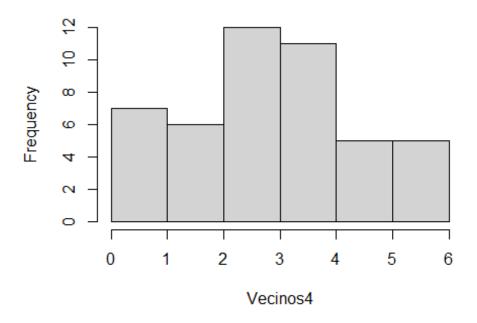
hist(Vecinos3)

## **Histogram of Vecinos3**



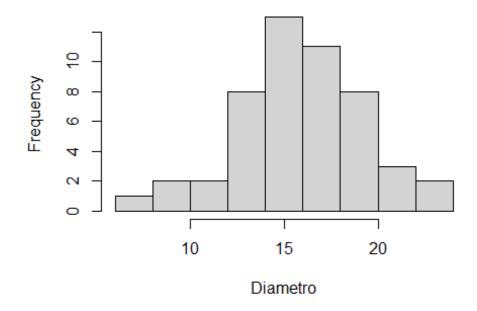
hist(Vecinos4)

## **Histogram of Vecinos4**



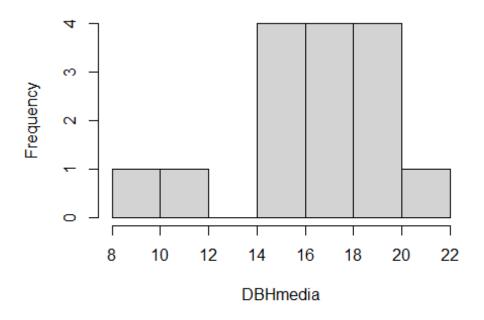
hist(Diametro)

## **Histogram of Diametro**



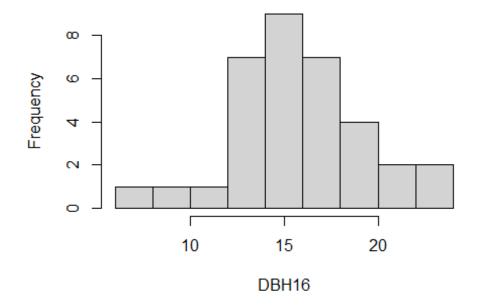
hist(DBHmedia)

#### Histogram of DBHmedia



hist(DBH16)

## Histogram of DBH16



#Estadistica básica
mean(Altura)

```
## [1] 13.9432
sd(Altura)
## [1] 2.907177
mean(H.media)
## [1] NA
sd(H.media)
## [1] NA
mean(Vecinos)
## [1] 3.34
sd(Vecinos)
## [1] 1.598596
mean(Vecinos3)
## [1] NA
sd(Vecinos3)
## [1] NA
mean(Vecinos4)
## [1] NA
sd(Vecinos4)
## [1] NA
mean(Diametro)
## [1] 15.794
sd(Diametro)
## [1] 3.227017
mean(DBHmedia)
## [1] NA
sd(DBHmedia)
## [1] NA
mean(DBH16)
```

## [1] NA sd(DBH16)

## [1] NA