Laboratorio_Semana3.R

Usuario1

2024-08-29

```
#Laboratorio semana 3
# 30/08/2024
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#IMPORTAR DATOS DE TRABAJO-----------------------------------------------
------------------------
tabla <- read.csv("C:/Repositorios_FJHN/Met_Est_2024/Clase/DATOS.csv",
header = TRUE)
head(tabla)
```

```
##   Arbol Fecha Especie Posicion Vecinos Diametro Altura
## 1     1    12       F        C       4     15.3  14.78
## 2     2    12       F        D       3     17.8  17.07
## 3     3     9       C        D       5     18.2  18.28
## 4     4     9       H        S       4      9.7   8.79
## 5     5     7       H        I       6     10.8  10.18
## 6     6    10       C        I       3     14.1  14.90
```

```
#Seleccion de datos-----------------------------------------------------
------------------------

# Aplicar la función subset para la variable Altura----------------------
------------------------
H.media <- which(tabla$Altura <16.5)
H.media
```

```
##  [1]  1  4  5  6  7  9 10 13 14 15 16 17 20 21 22 24 25 26 27 28 29 30
31 32 34
## [26] 35 36 38 39 40 41 42 43 44 45 46 47 48 50
```

```
mean(tabla$Altura)
```

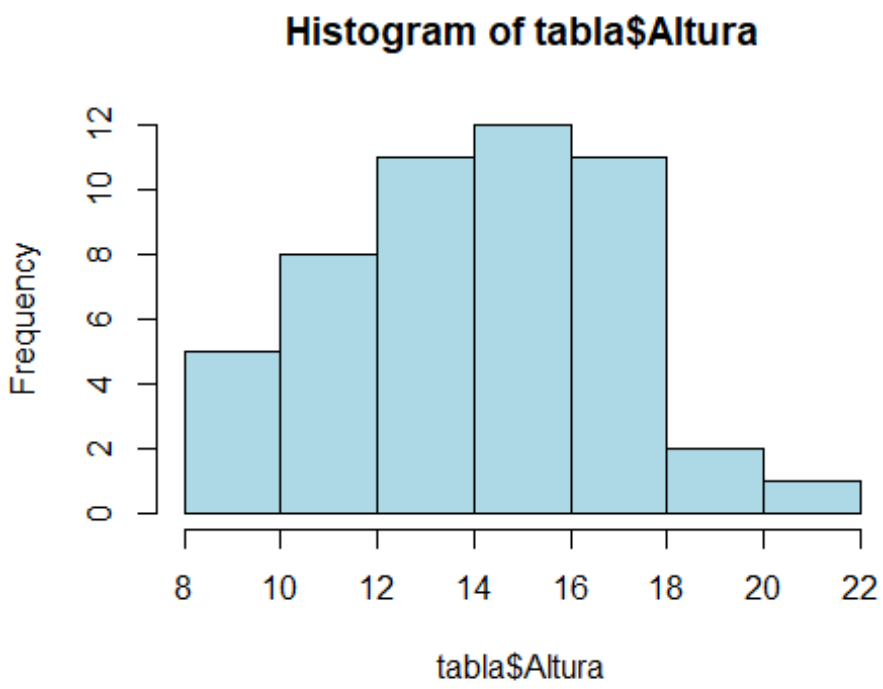
```
## [1] 13.9432
```

```
H.Media <- which(tabla$Altura <= mean(tabla$Altura))
H.Media
```

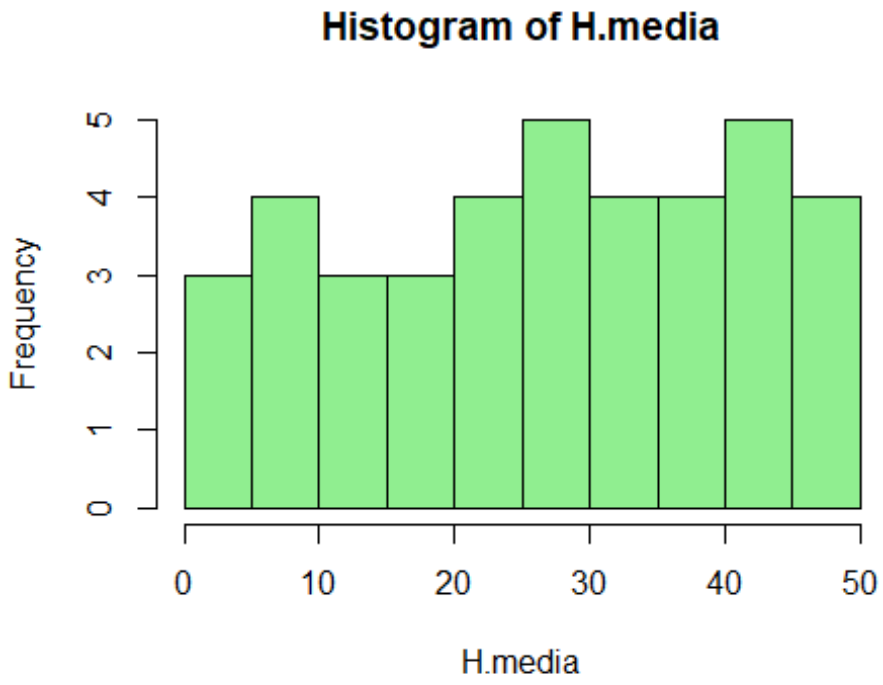
```
##  [1]  4  5 14 15 16 20 21 22 26 27 30 31 32 35 38 39 40 41 43 44 45 46
47 48
```

```
H.Media <- which(tabla$Altura>18.5)
H.Media
```

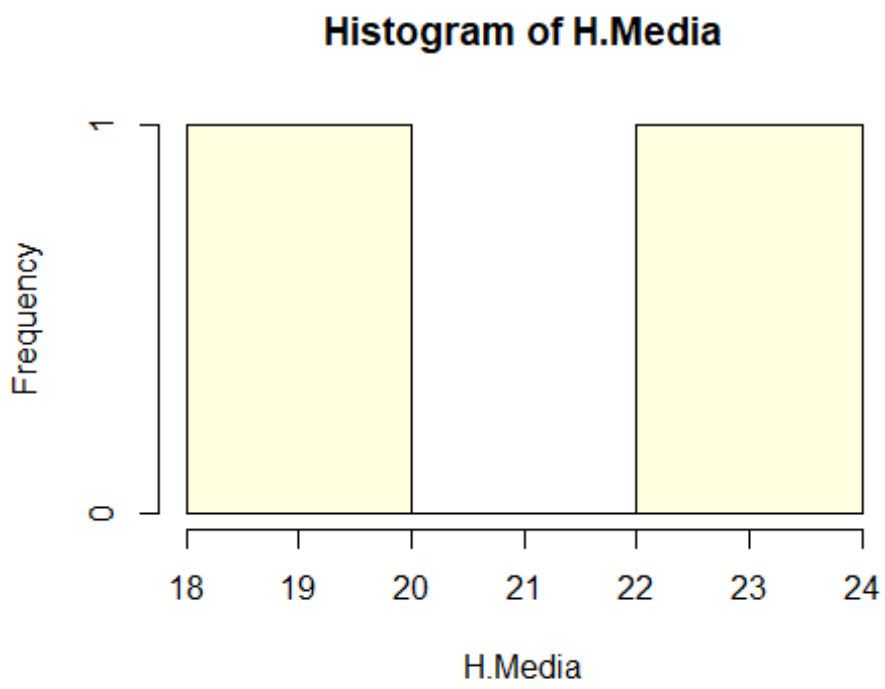
```
## [1] 18 23

# Aplicar la función subset para la variable Vecinos----------------------
--------------------------
Vecinos.3 <- which(tabla$Vecinos<=3)
Vecinos.3

##  [1]  2  6  7  8 11 13 14 16 17 18 20 23 25 27 28 29 30 31 36 37 38 41
42 46 49
## [26] 50

Vecinos.4 <- which(tabla$Vecinos>4)
Vecinos.4

##  [1]  3  5 10 12 21 32 34 40 44 47 48

# Aplicar la función subset para la variable Diametro----------------------
--------------------------
mean(tabla$Diametro)

## [1] 15.794

DBH.media <- which(tabla$Diametro<mean(tabla$Diametro))
DBH.media

##  [1]  1  4  5  6 11 12 16 19 21 24 28 31 32 33 34 35 39 40 41 42 44 45
46 47 48

DBH.16  <- which(tabla$Diametro>16)
DBH.16

##  [1]  2  3  7  8  9 10 13 14 15 17 18 20 22 23 25 27 29 30 36 37 38 43
49 50

DBH.16 <- which(tabla$Diametro<=16.9)
DBH.16

##  [1]  1  4  5  6 10 11 12 14 16 19 21 22 24 26 27 28 31 32 33 34 35 39
40 41 42
## [26] 43 44 45 46 47 48

 # Histogramas-------------------------------------------------------------
--------------------------
hist(tabla$Altura, col = "lightblue")
```



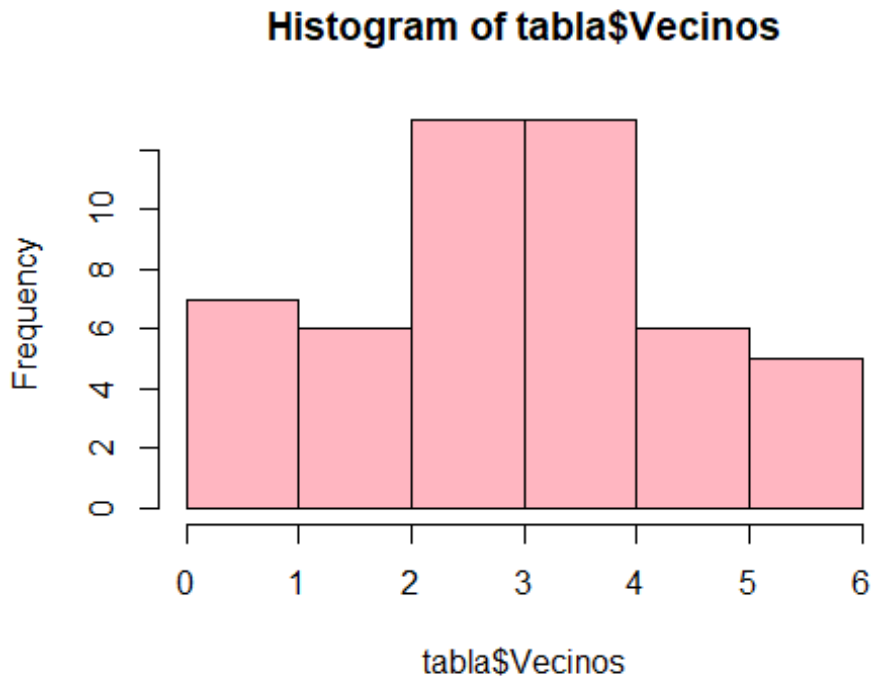

```
hist(H.media, col = "lightgreen")
```



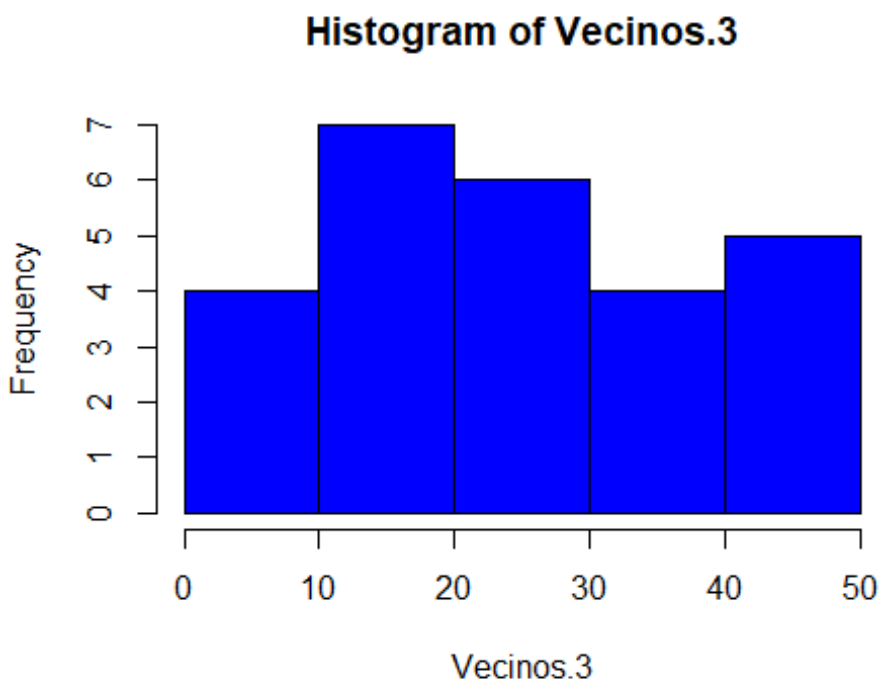

```
hist(H.Media, col = "lightyellow")
```



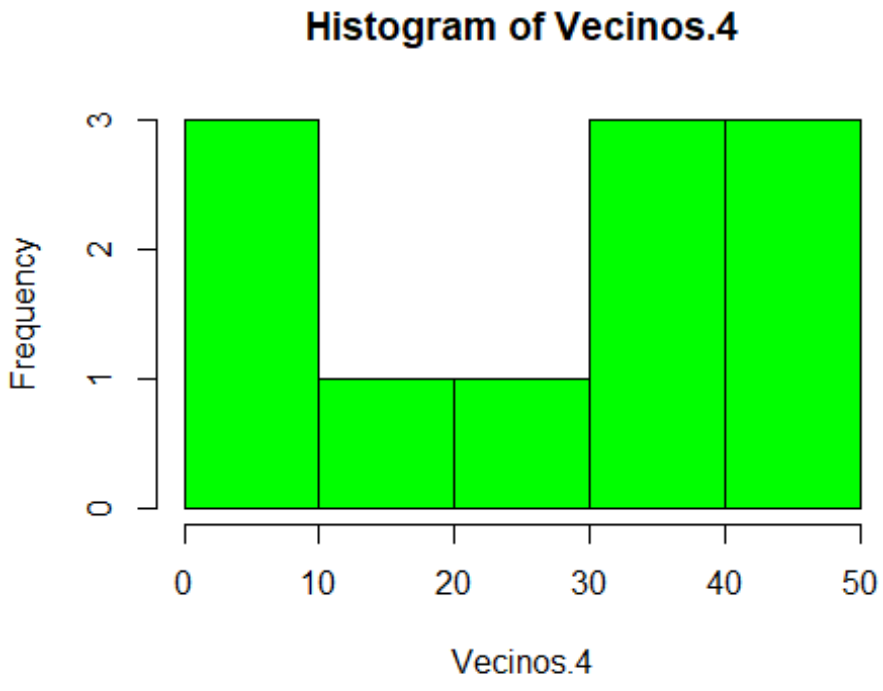

```
hist(tabla$Vecinos, col = "lightpink")
```



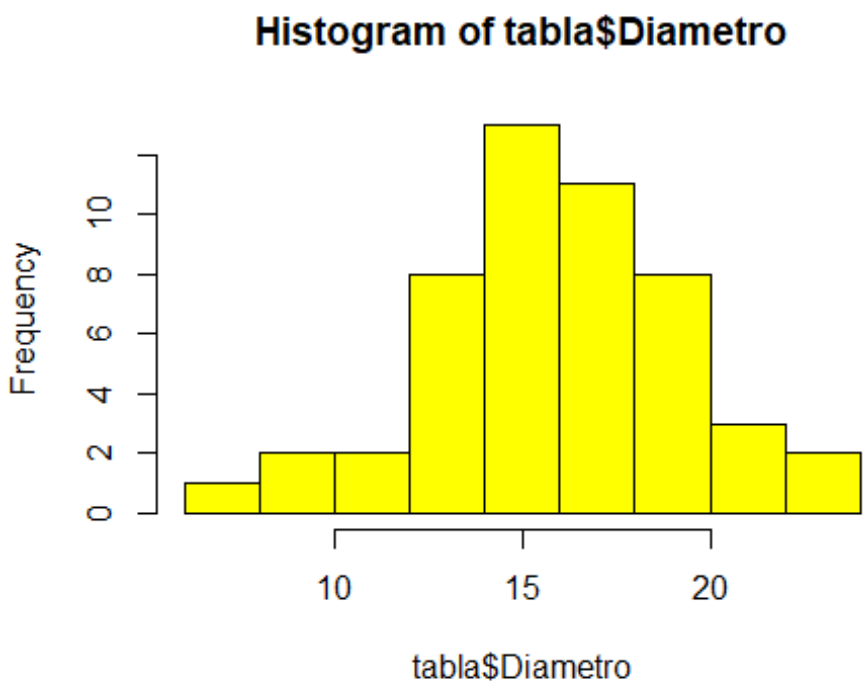

```
hist(Vecinos.3, col = "blue")
```



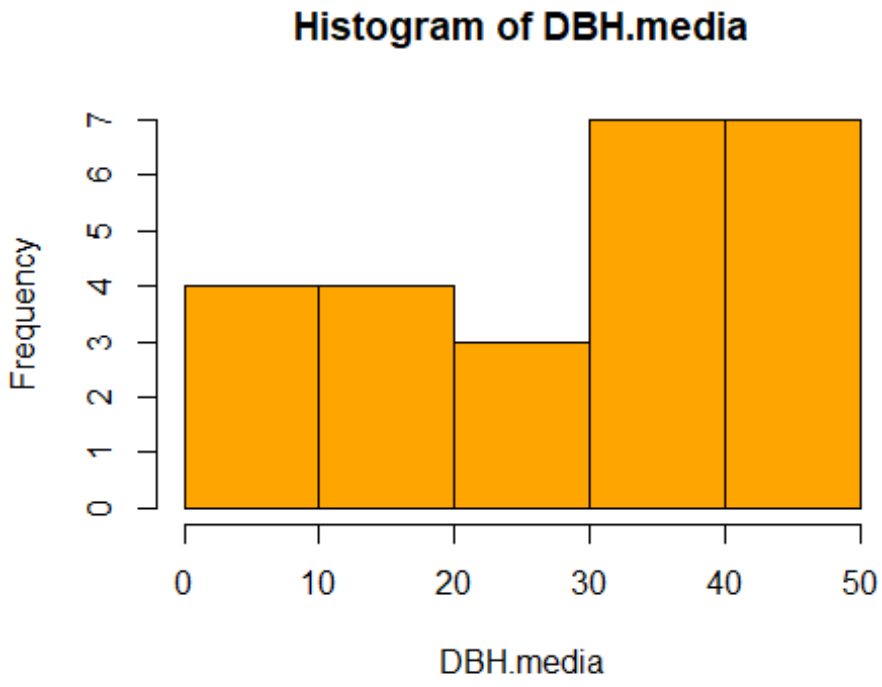

```
hist(Vecinos.4, col = "green")
```



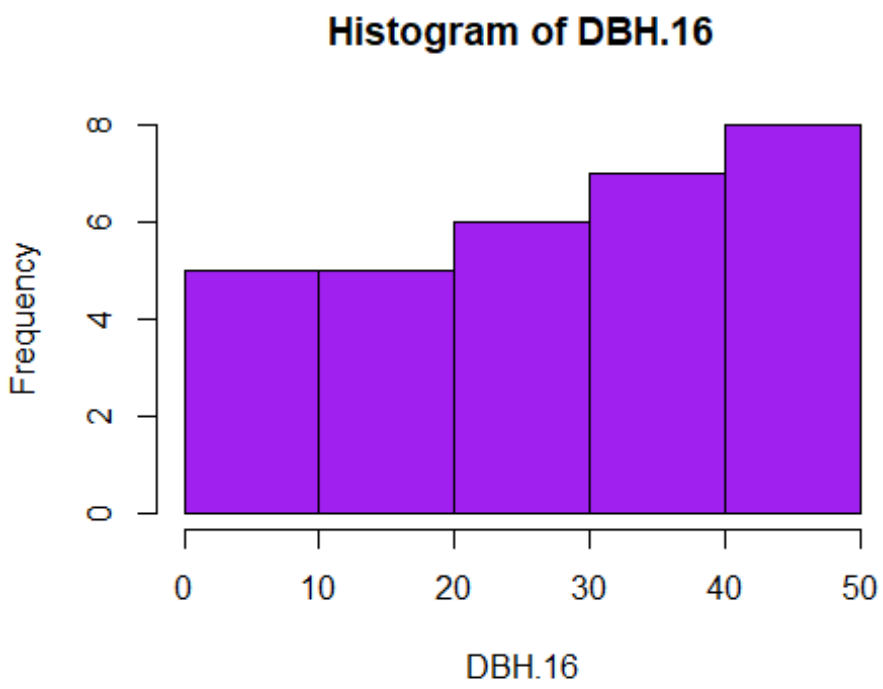

```
hist(tabla$Diametro, col = "yellow")
```




```r
hist(DBH.media, col = "orange")
```




```r
hist(DBH.16, col = "purple")
```




```
# Determinar la media-------------------------------------------------
--------------------------
mean(tabla$Altura)

## [1] 13.9432

mean(H.media)

## [1] 27.17949

mean(H.Media)

## [1] 20.5

mean(tabla$Vecinos)

## [1] 3.34

mean(Vecinos.3)

## [1] 25.53846

mean(Vecinos.4)

## [1] 26.90909

mean(tabla$Diametro)

## [1] 15.794
```

```
mean(DBH.media)
```

```
## [1] 28.16
```

```
mean(DBH.16)
```

```
## [1] 27.29032
```