Tarea-2.R

Usuario

2024-08-30

```
setwd("C:/Repositorios/Met_Est_2024/Tarea 2")
conjunto <- read.csv("base de datos tarea 2.csv", header=TRUE)
head(conjunto)
```

```
##   Arbol Fecha Especie Posición 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
```

```
H.media <- which(conjunto$Altura<=mean(conjunto$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.16 <-which(conjunto$Altura<16.5)
H.16
```

```
##  [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
```

```
Vecinos_3 <- which(conjunto$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
```

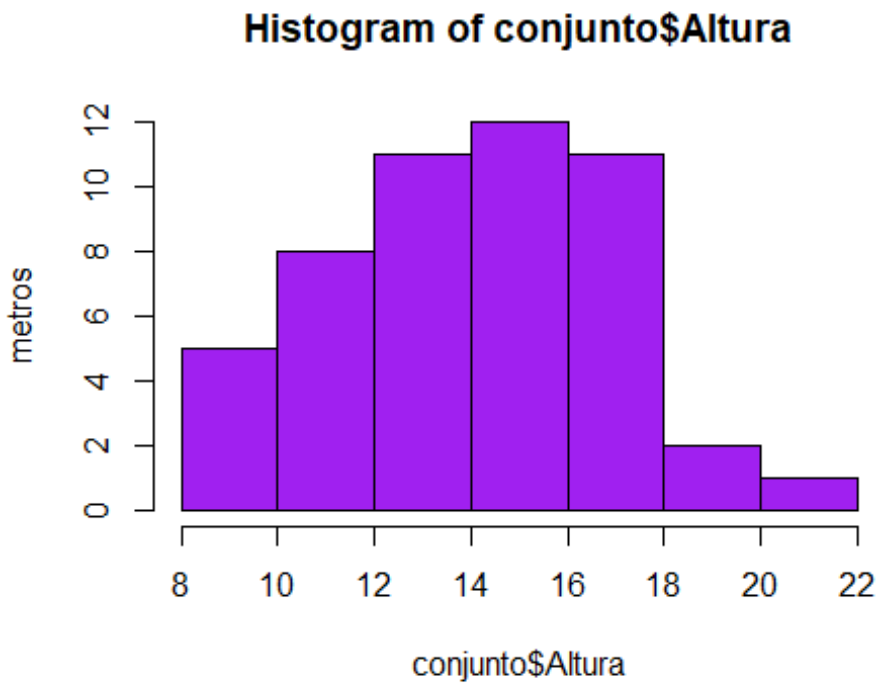
```
Vecinos_4 <- which(conjunto>4)
Vecinos_4
```

```
##   [1]   5   6   7   8   9  10  11  12  13  14  15  16  17  18  19  20
21  22
##  [19]  23  24  25  26  27  28  29  30  31  32  33  34  35  36  37  38
39  40
##  [37]  41  42  43  44  45  46  47  48  49  50  51  52  53  54  55  56
57  58
##  [55]  59  60  61  62  63  64  65  66  67  68  69  70  71  72  73  74
75  76
##  [73]  78  79  80  81  82  83  84  85  86  87  88  89  90  91  92  93
```

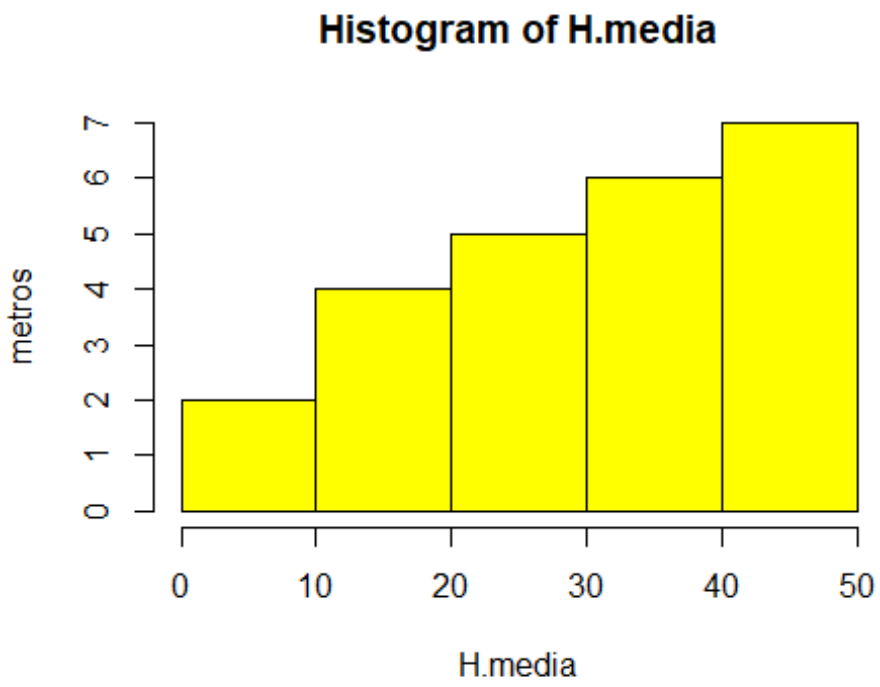
```
94  95
##  [91]  96  97  98  99 100 101 102 103 104 105 106 107 108 109 110 111
112 113
## [109] 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129
130 131
## [127] 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147
148 149
## [145] 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165
166 167
## [163] 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183
184 185
## [181] 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 203
205 210
## [199] 212 221 232 234 240 244 247 248 251 252 253 254 255 256 257 258
259 260
## [217] 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276
277 278
## [235] 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294
295 296
## [253] 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312
313 314
## [271] 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330
331 332
## [289] 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348
349 350

DBH.media <- which(conjunto$Diametro<mean(conjunto$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(conjunto$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

Especie <- c("cegro negro", "Tsuga heterófila", "Douglasia verde")
Especie

## [1] "cegro negro"      "Tsuga heterófila" "Douglasia verde"

Diametro_16.9 <- which(conjunto$Diametro<=16.9)
Diametro_16.9

##  [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

Altura_18.5 <-which(conjunto$Altura>18.5)
Altura_18.5
```

```
## [1] 18 23
```

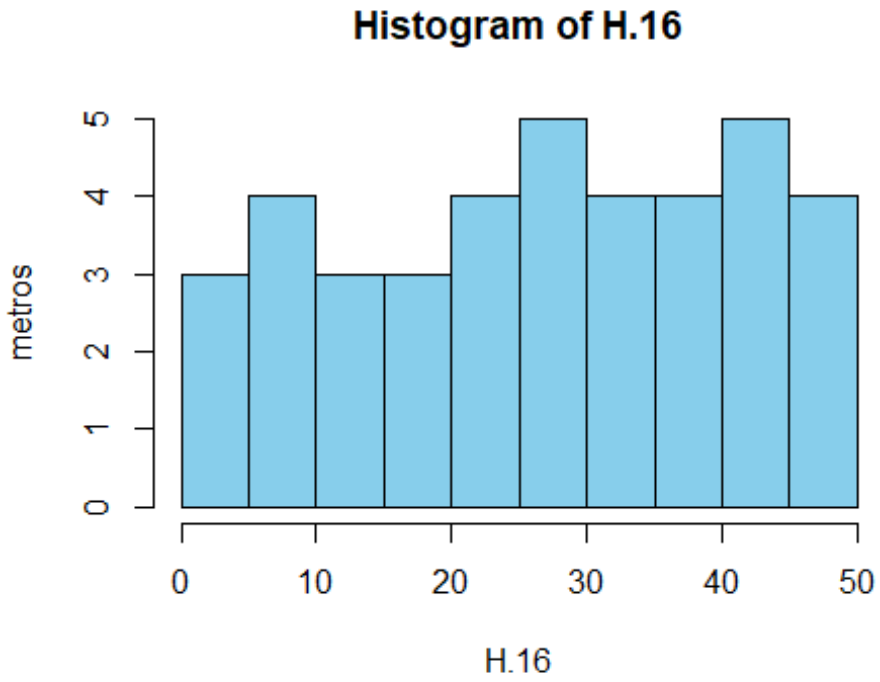
```
hist(conjunto$Altura,
     ylab = "metros",
     col = "purple")
```



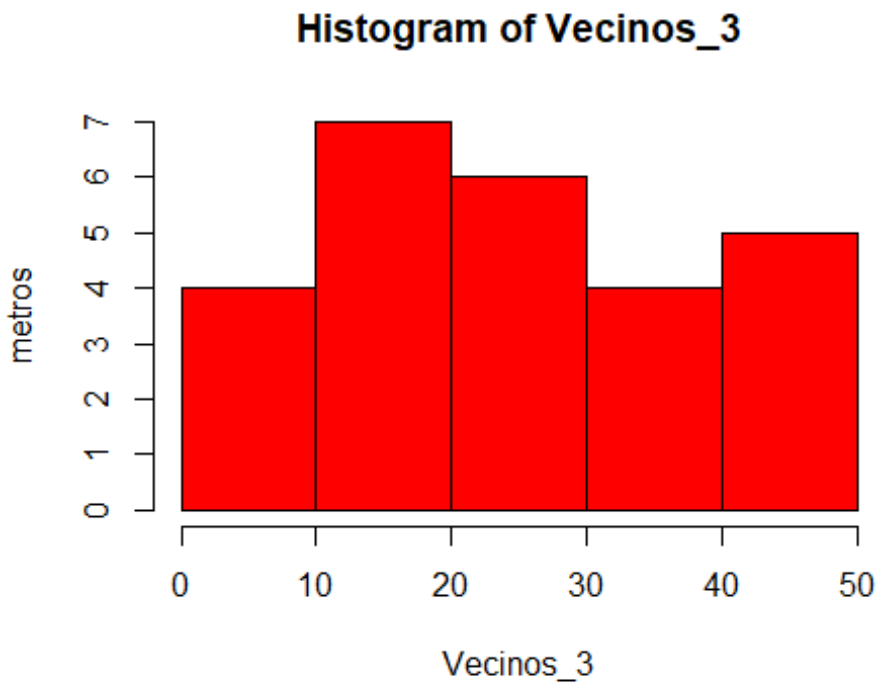

```
hist(H.media,
     ylab = "metros",
     col = "yellow")
```



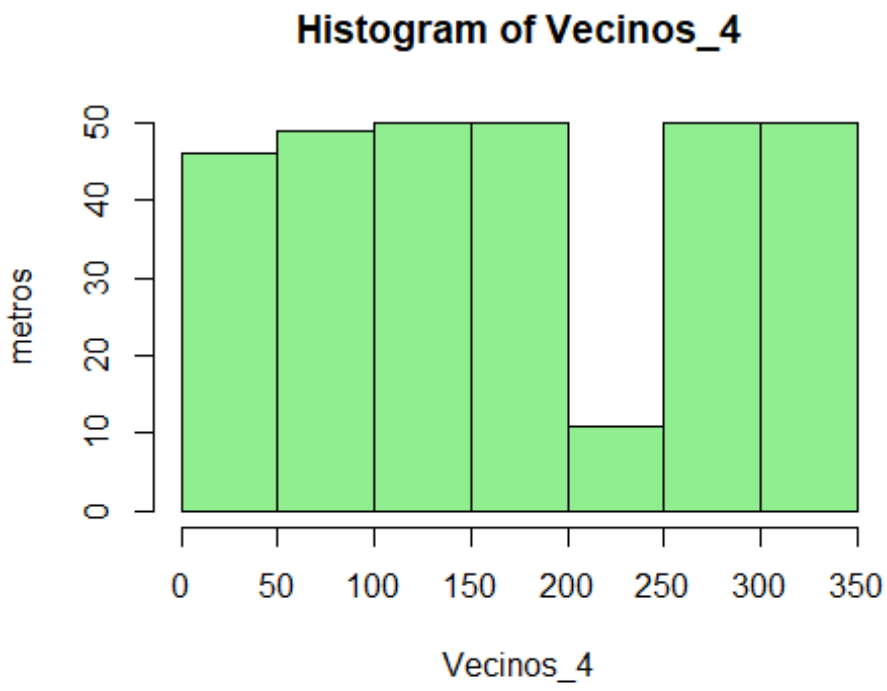

```
hist(H.16,
     ylab = "metros",
     col = "skyblue")
```



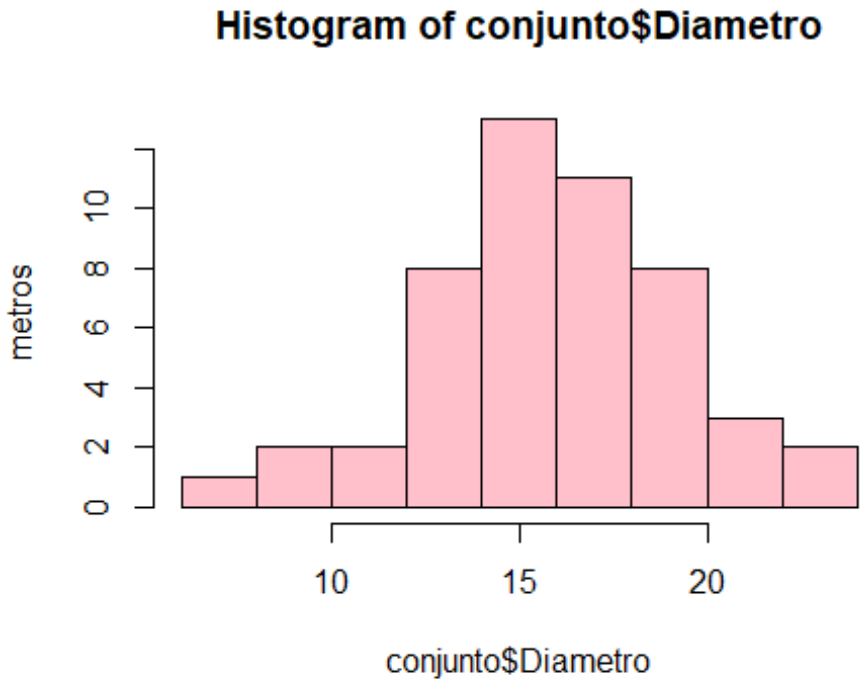
```
hist(Vecinos_3,
     ylab = "metros",
     col = "red")
```



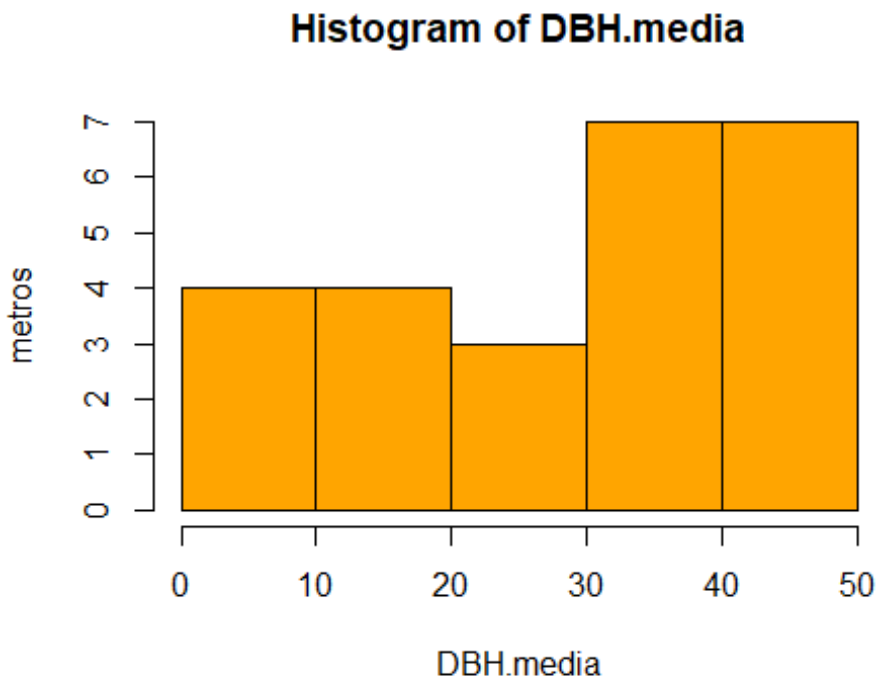

```
hist(Vecinos_4,
     ylab = "metros",
     col = "lightgreen")
```



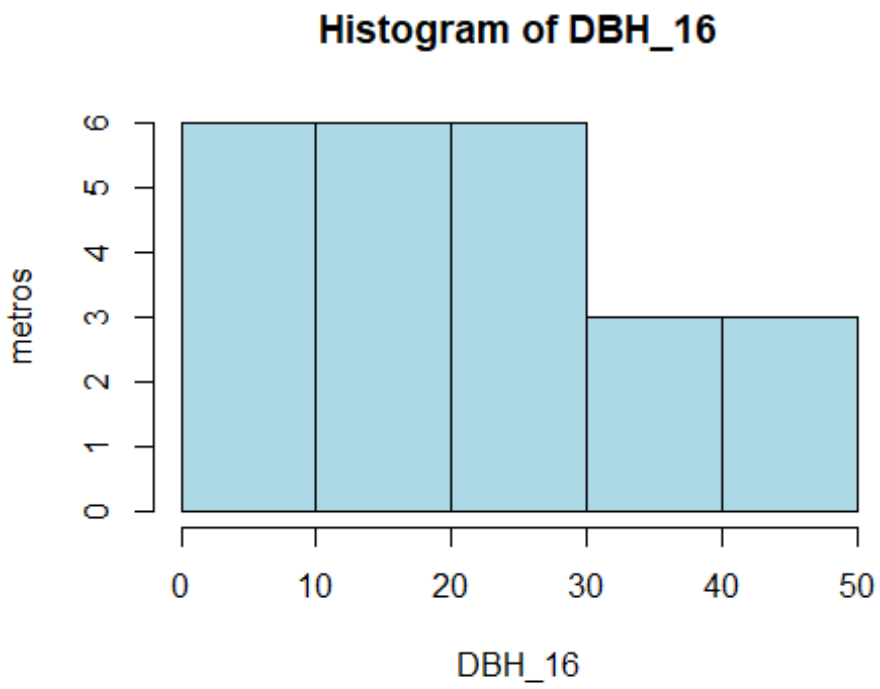

```
hist(conjunto$Diametro,
     ylab = "metros",
     col = "pink")
```



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




```
hist(DBH_16,
     ylab = "metros",
     col = "lightblue")
```




```
mean(conjunto$Altura)
## [1] 13.9432
sd(conjunto$Altura)
## [1] 2.907177
mean(H.media)
## [1] 30.375
sd(H.media)
## [1] 13.35083
mean(H.16)
## [1] 27.17949
sd(H.16)
## [1] 14.23463
mean(Vecinos_3)
## [1] 25.53846
sd(Vecinos_3)
```

```
## [1] 13.98637
mean(Vecinos_4)
## [1] 171.7614
sd(Vecinos_4)
## [1] 104.5808
mean(conjunto$Diametro)
## [1] 15.794
sd(conjunto$Diametro)
## [1] 3.227017
mean(DBH.media)
## [1] 28.16
sd(DBH.media)
## [1] 15.20329
mean(DBH_16)
## [1] 22.70833
sd(DBH_16)
## [1] 13.98906
```