

Solucion_tarea02.R

Usuario

2020-02-20

```
# Ejercicio 1
```

```
library(plyr)
accidentes <- c(0,1,0,2,2,1,4,3,0,1,5,1,2,3,4,0,1,1,3,4)
acc <- count(accidentes)
acc # Vemos la primera BD creadas con solo dos columnas
```

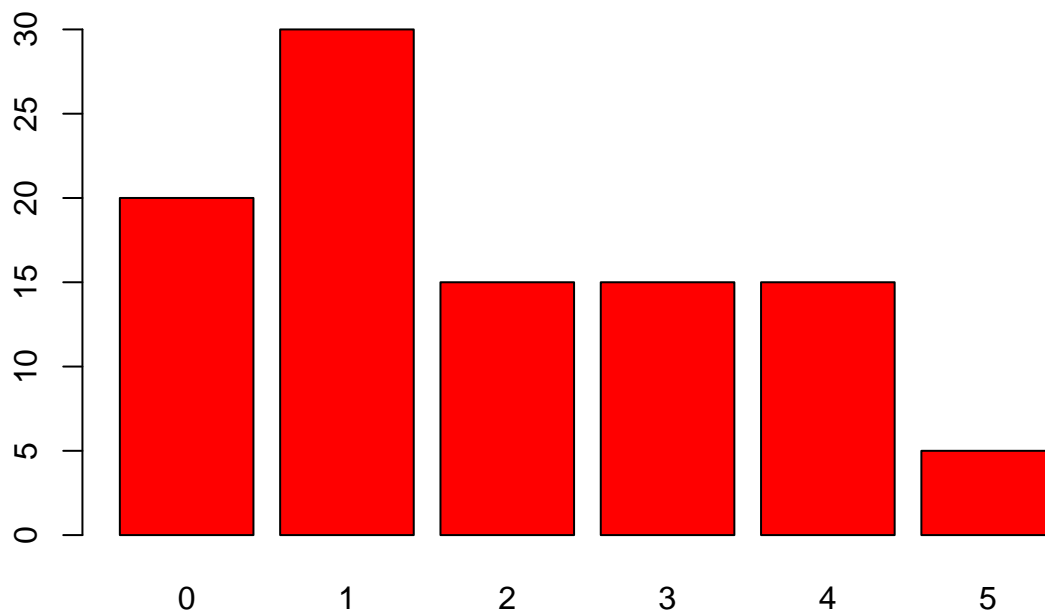
```
##  x freq
## 1 0    4
## 2 1    6
## 3 2    3
## 4 3    3
## 5 4    3
## 6 5    1
```

```
# Agregar una nueva columna a la BD "acc" y agregar la formula
# de tres simple para calcular el porcentaje.
```

```
acc$rf <- acc$freq/sum(acc$freq)*100
acc
```

```
##  x freq rf
## 1 0    4 20
## 2 1    6 30
## 3 2    3 15
## 4 3    3 15
## 5 4    3 15
## 6 5    1  5
```

```
barplot(acc$rf, names.arg = acc$x, col="red")
```

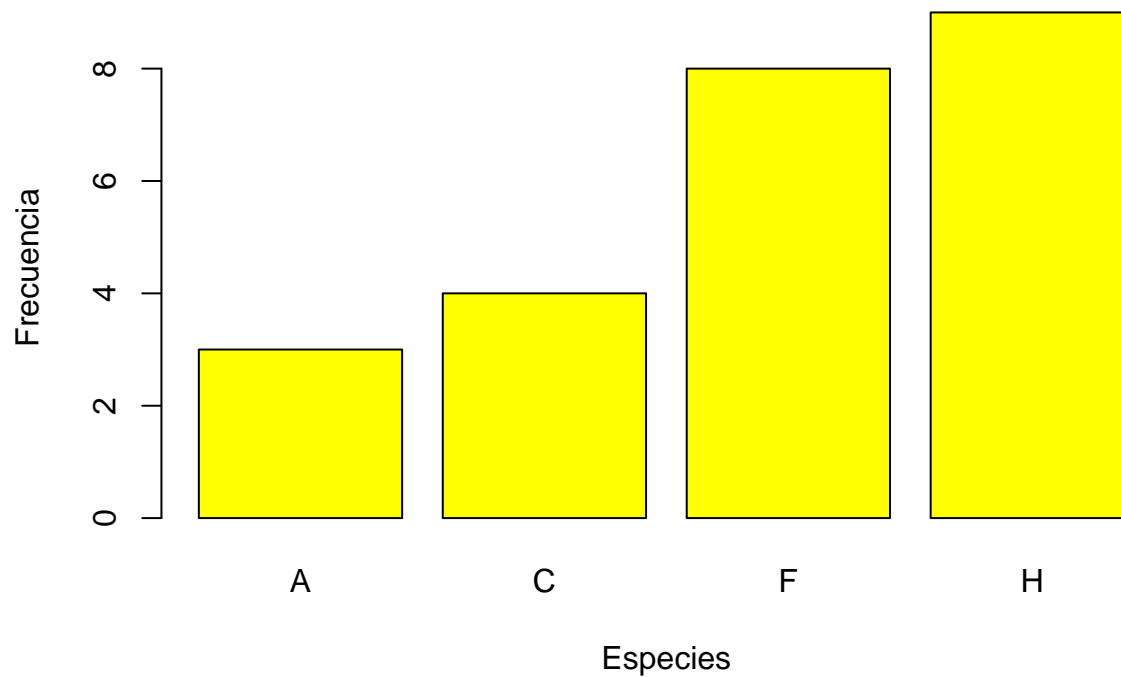


Ejercicio 2

```
especies <- c("F", "H", "F", "C", "F", "A", "H", "F",
              "H", "C", "A", "C", "F", "H", "H", "H",
              "F", "H", "A", "C", "F", "H", "H", "F")
.sp <- count(especies)
.sp$rf <- .sp$freq/sum(.sp$freq)*100
.sp
```

```
##  x freq      rf
## 1 A   3 12.50000
## 2 C   4 16.66667
## 3 F   8 33.33333
## 4 H   9 37.50000
```

```
barplot(.sp$freq, names.arg = .sp$x, col = "yellow",
        ylab = "Frecuencia", xlab = "Especies")
```



Ejercicio 3

```
library(repmis)
conjunto <- source_data("https://www.dropbox.com/s/hmsf07bbayxv6m3/cuadro1.csv?dl=1")
```

```
## Downloading data from: https://www.dropbox.com/s/hmsf07bbayxv6m3/cuadro1.csv?dl=1
```

```
## SHA-1 hash of the downloaded data file is:
```

```
## 2bdde4663f51aa4198b04a248715d0d93498e7ba
```

```
# Encontrar la frecuencia de las variables vecinos y especies
```

```
.vc <- table(conjunto$Vecinos, conjunto$Especie)
```

```
.vc1 <- addmargins(as.table(.vc))
```

```
.vc1
```

```
##
```

```
##      C  F  H Sum
```

```
## 0    1  0  2   3
```

```
## 1    1  2  1   4
```

```
## 2    3  2  1   6
```

```
## 3    5  3  5  13
```

```
## 4    5  5  3  13
```

```
## 5    5  1  0   6
```

```
## 6    2  1  2   5
```

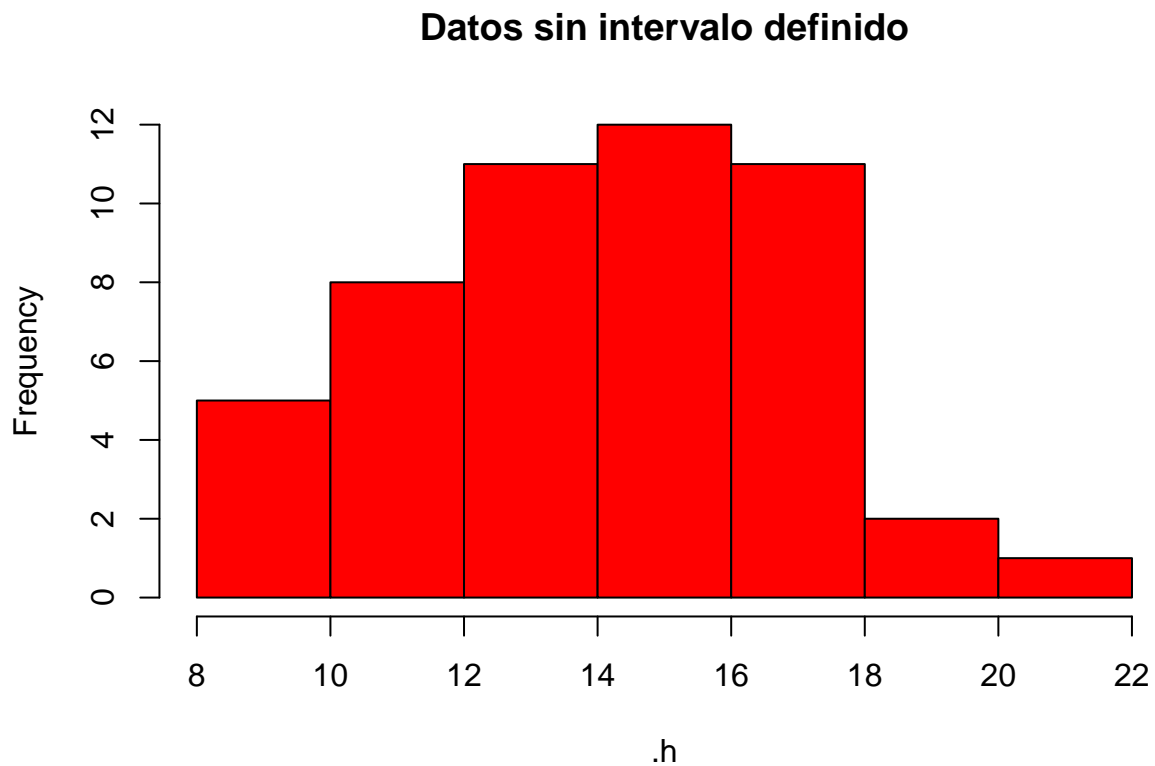
```
## Sum 22 14 14  50
```

```
# Ejercicio 4
```

```
.h <- conjunto$Altura  
range(.h)
```

```
## [1] 8.47 21.46
```

```
hist(.h, main = "Datos sin intervalo definido", col= "red")
```



```
Intervalo <- seq(7.5, 22.5, by=5)  
Intervalo
```

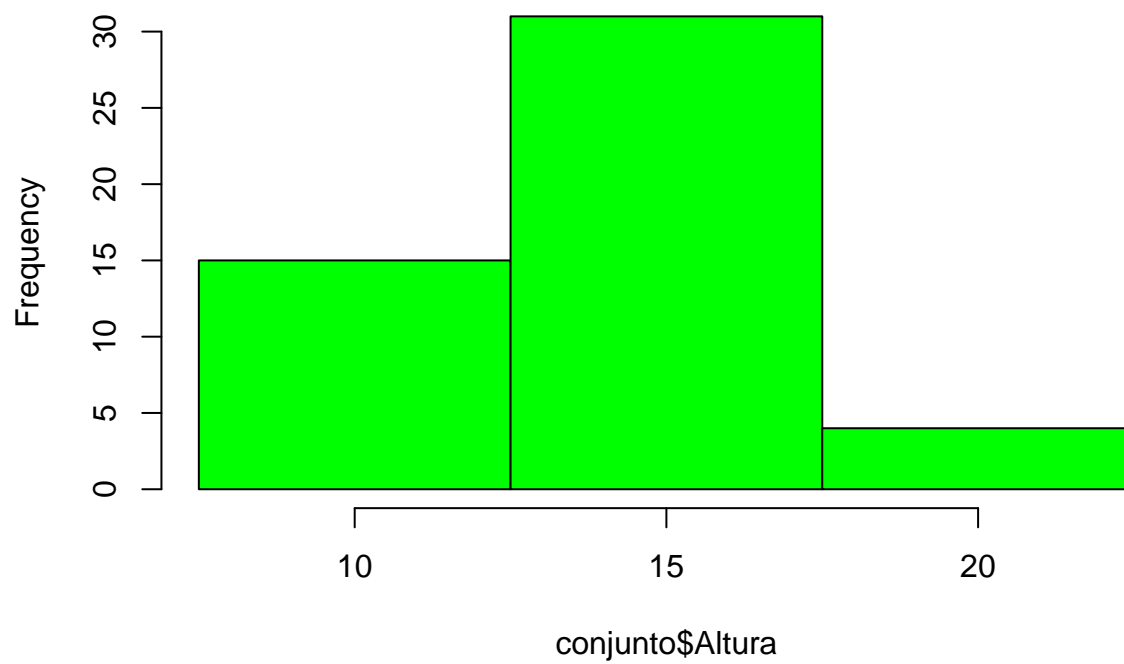
```
## [1] 7.5 12.5 17.5 22.5
```

```
h.table <- cut(.h, Intervalo)  
table(h.table)
```

```
## h.table  
## (7.5,12.5] (12.5,17.5] (17.5,22.5]  
##          15          31           4
```

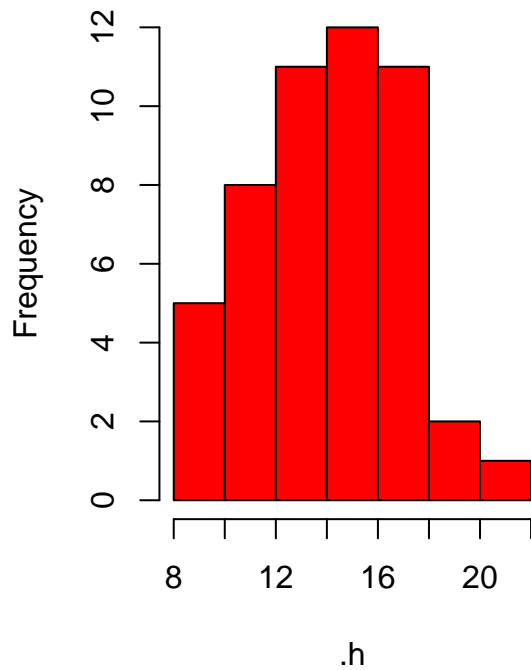
```
hist(conjunto$Altura, breaks = Intervalo,  
     main="Datos con intervalo definido",  
     col="green")
```

Datos con intervalo definido

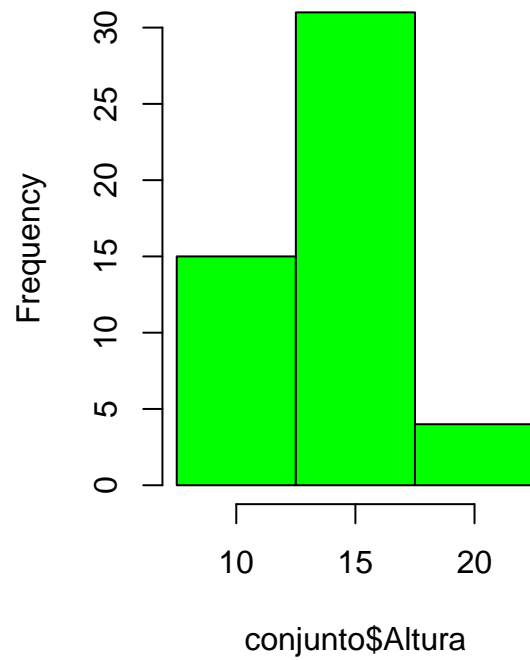


```
par(mfrow=c(1,2))
hist(.h, main = "Datos sin intervalo definido", col= "red")
hist(conjunto$Altura, breaks = Intervalo,
      main="Datos con intervalo definido",
      col="green")
```

Datos sin intervalo definido



Datos con intervalo definido



```
par(mfrow=c(1,1))
```

```
range(conjunto$Diametro)
```

```
## [1] 7.7 22.7
```

```
interv <- seq(7.5, 27.5, by=5)
interv
```

```
## [1] 7.5 12.5 17.5 22.5 27.5
```

```
hist(conjunto$Diametro, breaks = interv, col = "yellow2")
```

Histogram of conjunto\$Diametro

