Clase_S05_D1.R

isa_r

2022-05-20

```r
# Amanda
# Semana 5
# 16/02/2022


url <- paste0("https://raw.githubusercontent.com/mgtagle/",
"PrincipiosEstadistica2021/main/cuadro1.csv")

inventario <- read.csv(url)
summary(inventario)
```

```
##      Arbol           Fecha          Especie           Posicion
##  Min.   : 1.00   Min.   : 2.00   Length:50         Length:50
##  1st Qu.:13.25   1st Qu.:12.00   Class :character   Class :character
##  Median :25.50   Median :16.00   Mode  :character   Mode  :character
##  Mean   :25.48   Mean   :15.94
##  3rd Qu.:37.75   3rd Qu.:20.75
##  Max.   :50.00   Max.   :25.00
##     Vecinos        Diametros        Altura
##  Min.   :0.00   Min.   : 7.70   Min.   : 8.47
##  1st Qu.:2.25   1st Qu.:13.88   1st Qu.:11.78
##  Median :3.00   Median :15.70   Median :14.24
##  Mean   :3.34   Mean   :15.79   Mean   :13.94
##  3rd Qu.:4.00   3rd Qu.:18.10   3rd Qu.:16.05
##  Max.   :6.00   Max.   :22.70   Max.   :21.46
```

```r
inventario$Especie <-  as.factor(inventario$Especie) # el comando
as.factor convierte
summary(inventario)
```

```
##      Arbol           Fecha        Especie   Posicion              Vecinos
##  Min.   : 1.00   Min.   : 2.00   C:22    Length:50         Min.
## :0.00
##  1st Qu.:13.25   1st Qu.:12.00   F:14    Class :character   1st
## Qu.:2.25
##  Median :25.50   Median :16.00   H:14    Mode  :character   Median
## :3.00
##  Mean   :25.48   Mean   :15.94                             Mean
## :3.34
##  3rd Qu.:37.75   3rd Qu.:20.75                             3rd
## Qu.:4.00
##  Max.   :50.00   Max.   :25.00                             Max.
```

```
:6.00
##    Diametros        Altura
##  Min.   : 7.70   Min.   : 8.47
##  1st Qu.:13.88   1st Qu.:11.78
##  Median :15.70   Median :14.24
##  Mean   :15.79   Mean   :13.94
##  3rd Qu.:18.10   3rd Qu.:16.05
##  Max.   :22.70   Max.   :21.46

inventario$Posicion <- as.factor(inventario$Posicion)
summary(inventario)

##      Arbol           Fecha         Especie Posicion    Vecinos
##  Min.   : 1.00   Min.   : 2.00   C:22    C:14     Min.   :0.00
##  1st Qu.:13.25   1st Qu.:12.00   F:14    D: 9     1st Qu.:2.25
##  Median :25.50   Median :16.00   H:14    I:19     Median :3.00
##  Mean   :25.48   Mean   :15.94           S: 8     Mean   :3.34
##  3rd Qu.:37.75   3rd Qu.:20.75                    3rd Qu.:4.00
##  Max.   :50.00   Max.   :25.00                    Max.   :6.00
##    Diametros        Altura
##  Min.   : 7.70   Min.   : 8.47
##  1st Qu.:13.88   1st Qu.:11.78
##  Median :15.70   Median :14.24
##  Mean   :15.79   Mean   :13.94
##  3rd Qu.:18.10   3rd Qu.:16.05
##  Max.   :22.70   Max.   :21.46
```

Obtener una tabla de frecuencia para las variables Especie y Posición.
Usar la función table

```
freq.sp <- table(inventario$Especie)
porciento <- freq.sp/sum(freq.sp)*100
sum(porciento)

## [1] 100

freq.psn <- table(inventario$Posicion)
freq.psn/sum(freq.psn)*100

##
##  C  D  I  S
## 28 18 38 16
```
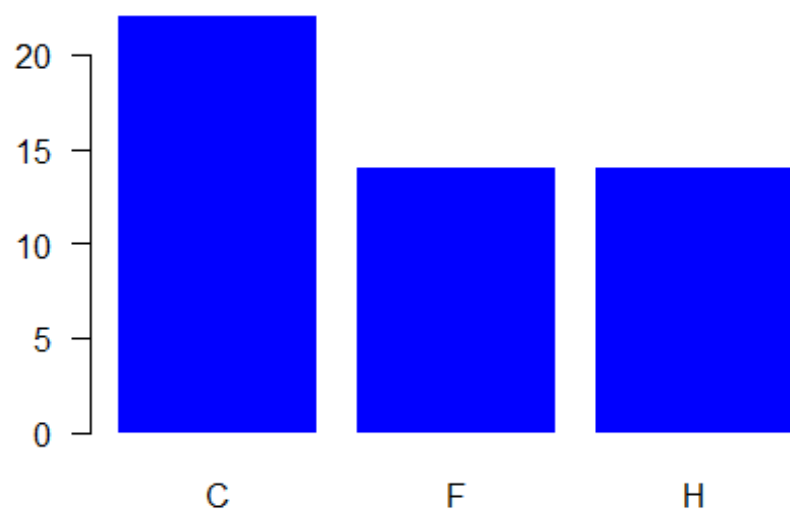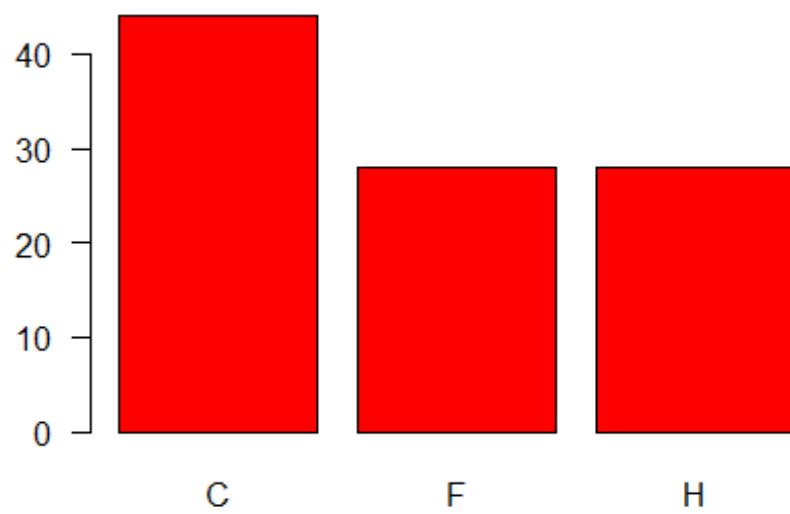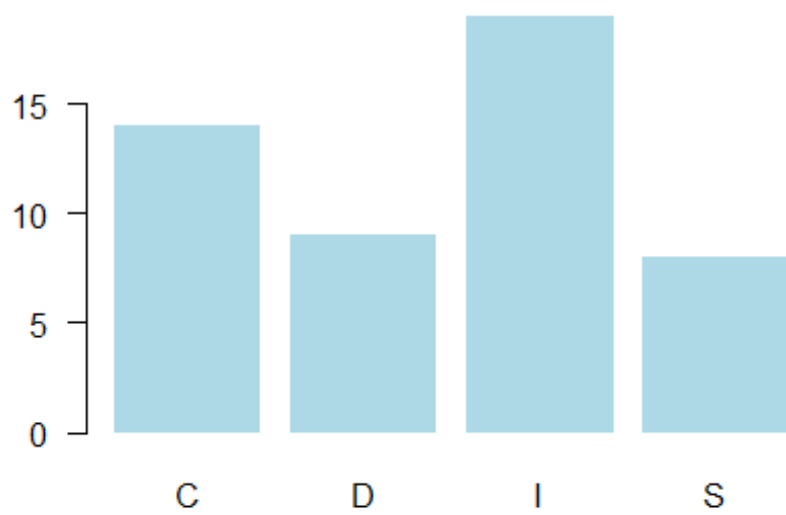
Porcentaje de posición

```
por.pos <- freq.psn/sum(freq.psn)*100
barplot(freq.sp, col = "blue", las =1, border = NA)
```
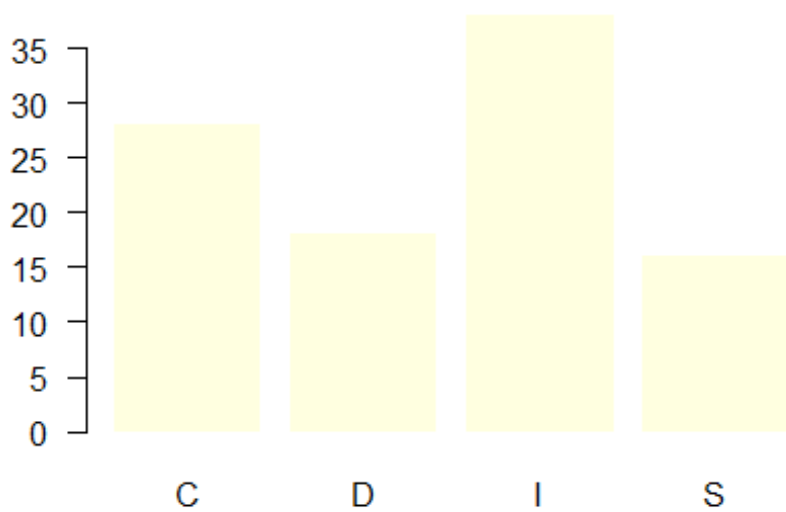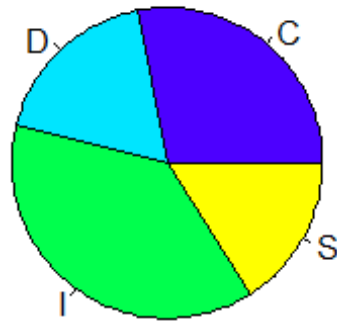
```
barplot(porciento, col = "red", las =1)
```



```
barplot(freq.psn, las =1, col = "lightblue", border = NA)
```
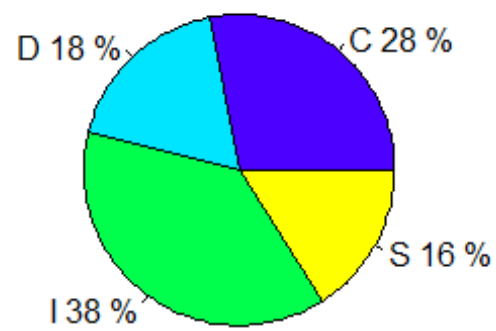
```
barplot(por.pos, las =1, col = "lightyellow", border = NA)
```



```
pie(freq.psn, col = topo.colors(4))
```

```
pie(por.pos, col = topo.colors(4), labels =
paste(levels(inventario$Posicion), por.pos, "%"))
```

```r
pie(freq.sp, col = topo.colors(3), labels =
paste(levels(inventario$Especie), freq.sp, "ind"))
```