Semana5.R

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```
#MZZ
#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

Inventario$Especie <- as.factor(Inventario$Especie)
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
```

```r
Inventario$Posicion <- as.factor(Inventario$Posicion)


#Obtener una tabla de frecuencias para las variables Especies
#Y Posicion. Usar la funcion table


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

```
##
##  C  F  H
## 44 28 28
```

```r
porciento <-freq.sp/sum(freq.sp)*100
sum(porciento)
```

```
## [1] 100
```

```r
table(Inventario$Posicion)
```

```
##
##  C  D  I  S
## 14  9 19  8
```

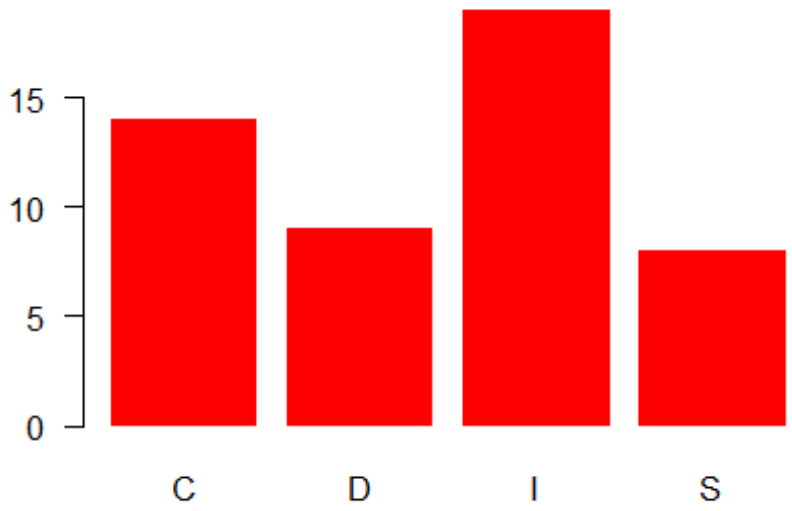
```r
fre.sp <- table(Inventario$Posicion)
fre.sp/sum(fre.sp)*100
```

```
##
##  C  D  I  S
## 28 18 38 16
```

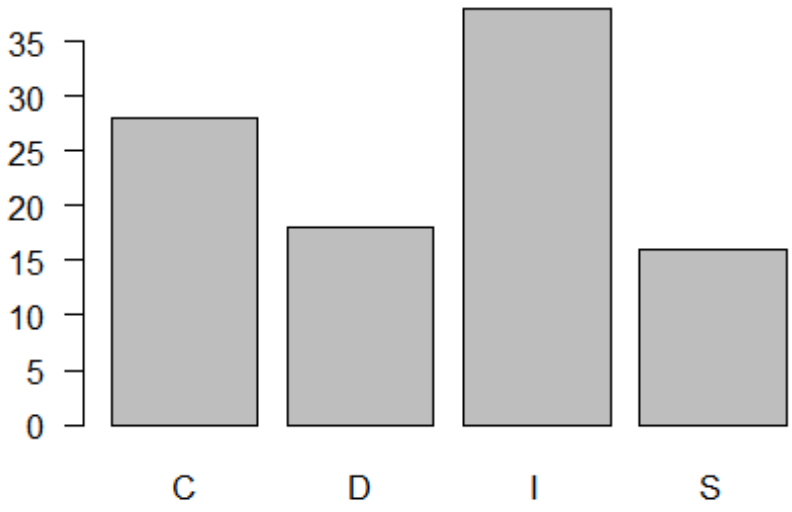
```r
porcentaje <- fre.sp/sum(fre.sp)*100
sum(porcentaje)
```

```
## [1] 100
```

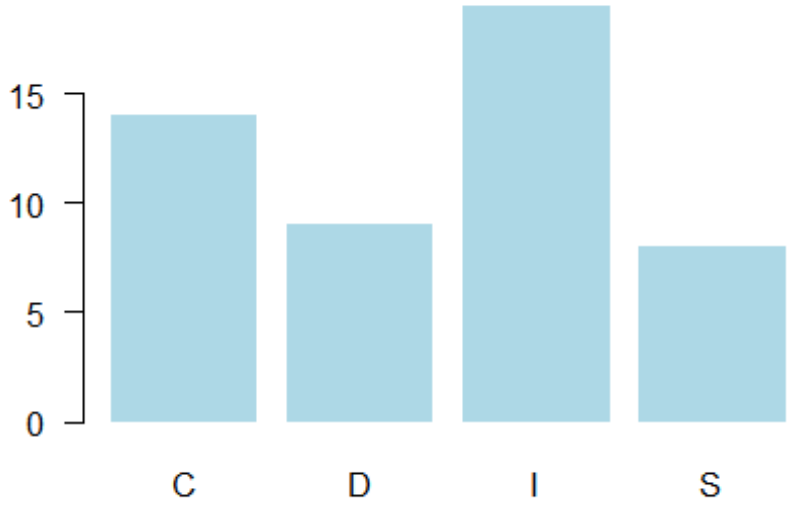
```r
por.pos <- fre.sp/ sum(fre.sp)*100
barplot(fre.sp, col = "red", las =1, border = NA)
```



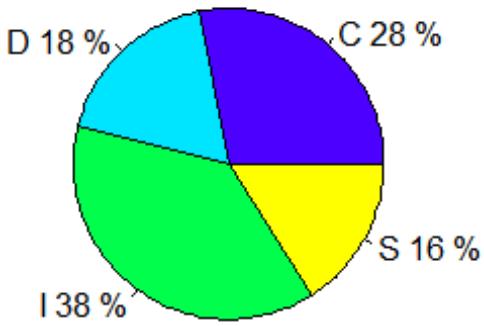

```
barplot(porcentaje, col ="grey", las =1)
```




```
barplot(fre.sp, las=1, col = "lightblue", border = NA)
```




```
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"))
```