

```

#GUIA 7

getwd()

## [1] "C:/Users/Roxy/Documents/ROXANA BEATRIZ RONQUILLO UMAA/Guias de R"

setwd("C:/Users/Roxy/Documents/jjjjjjjjjj")
Hijos <- c(2, 1, 2, 1, 4, 2, 3, 0, 2, 3, 3, 2, 1, 0, 2, 4, 1, 2, 1, 3, 4, 1, 2, 3, 1, 5, 2,
data.entry(Hijos)
Hijos

## [1] 2 1 2 1 4 2 3 0 2 3 3 2 1 0 2 4 1 2 1 3 4 1 2 3 1 5 2 3 1 2

length(Hijos)

## [1] 30

write(Hijos, "Hijos.txt")
ls()

## [1] "Hijos"

rm(list=ls(all=TRUE)); ls()

## character(0)

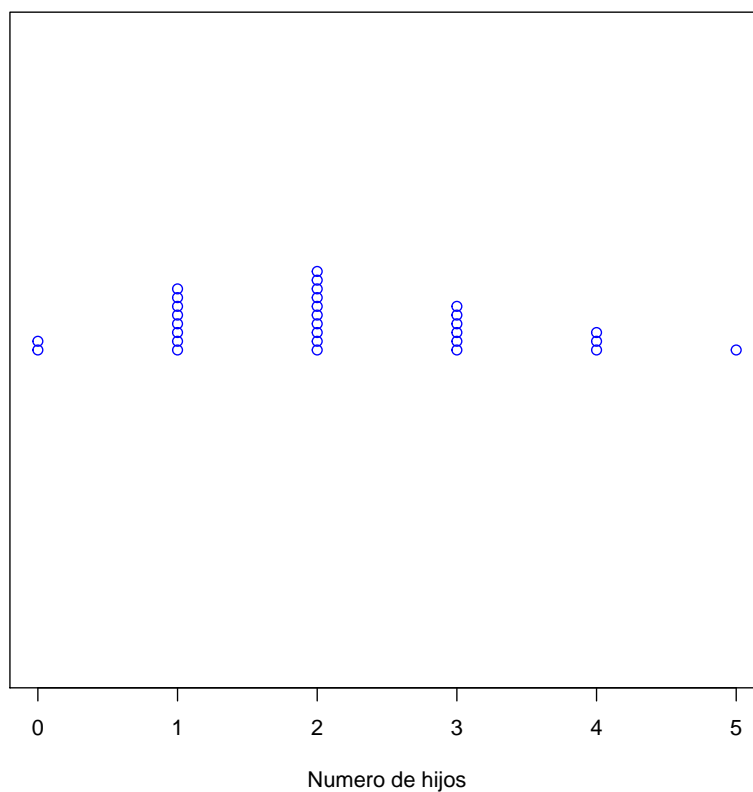
X <- scan("Hijos.txt", what = integer(0), na.strings = "NA", flush=FALSE)
ls()

## [1] "X"

stripchart(X, method="stack", vertical=FALSE, col="blue", pch=1, main="Grafico de\n puntos",

```

**Grafico de
puntos**



```
fab <- table(X); fab

## X
##  0  1  2  3  4  5
##  2  8 10  6  3  1

fre <- fab/length(X); fre

## X
##           0           1           2           3           4           5
## 0.06666667 0.26666667 0.33333333 0.20000000 0.10000000 0.03333333

Fac <- cumsum(fab); Fac

##  0  1  2  3  4  5
##  2 10 20 26 29 30
```

```

Far <- Fac/length(X); Far

##           0           1           2           3           4           5
## 0.06666667 0.33333333 0.66666667 0.86666667 0.96666667 1.00000000

options(digits=2)
tabla <- data.frame(fab=fab, fre=fre, Fac=Fac, Far=Far)
names(tabla) <- c("X", "fab", "free.X", "fre", "Fac", "Far")
tabla

##   X fab free.X   fre Fac   Far
## 0 0   2       0 0.067   2 0.067
## 1 1   8       1 0.267  10 0.333
## 2 2  10       2 0.333  20 0.667
## 3 3   6       3 0.200  26 0.867
## 4 4   3       4 0.100  29 0.967
## 5 5   1       5 0.033  30 1.000

tfre <- data.frame(X=tabla$X, fab=tabla$fab, fre=tabla$fre, Fac=tabla$Fac, Far=tabla$Far)
tfre

##   X fab   fre Fac   Far
## 1 0   2 0.067   2 0.067
## 2 1   8 0.267  10 0.333
## 3 2  10 0.333  20 0.667
## 4 3   6 0.200  26 0.867
## 5 4   3 0.100  29 0.967
## 6 5   1 0.033  30 1.000

media <- mean(X, na.rm = FALSE); media

## [1] 2.1

for(i in 1:length(X)) if (fab[i] == max(fab)) break()
moda <- names(fab[i]); moda # R no tiene incorporada una funcion para la moda

## [1] "2"

mediana <- median(X); mediana

## [1] 2

range(X)

## [1] 0 5

cuasivar <- var(X); cuasivar

```

```
## [1] 1.5

s <- sd(X); s

## [1] 1.2

quantile(X,c(0.25, 0.5, 0.75))

## 25% 50% 75%
##    1    2    3

quantile(X, 0.6)

## 60%
##    2

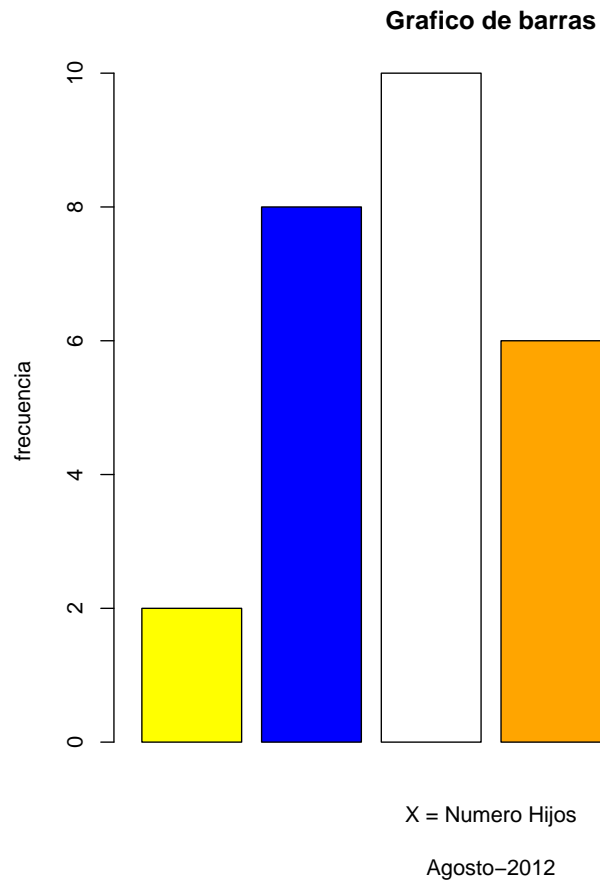
resumen <- summary(X); resumen

##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      0.0     1.0     2.0     2.1     3.0     5.0

fivenum(X)

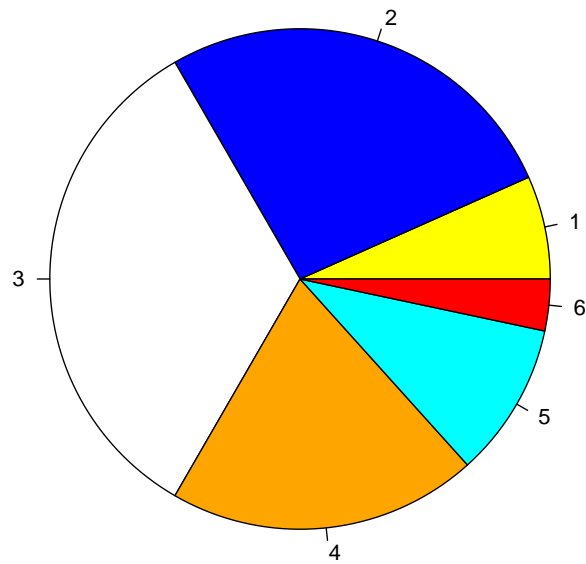
## [1] 0 1 2 3 5

barplot(tfre[[2]], main="Grafico de barras", xlab="X = Numero Hijos\n", ylab="frecuencia",
        col=c("yellow", "blue", "white", "orange", "cyan", "red"), sub="Agosto-2012")
```



```
pie(tfre[[2]], main="Grafico de pastel", xlab="Numero Hijos \n", col=c("yellow", "blue",
                                "white", "orange", "cyan", "red"))
```

Grafico de pastel

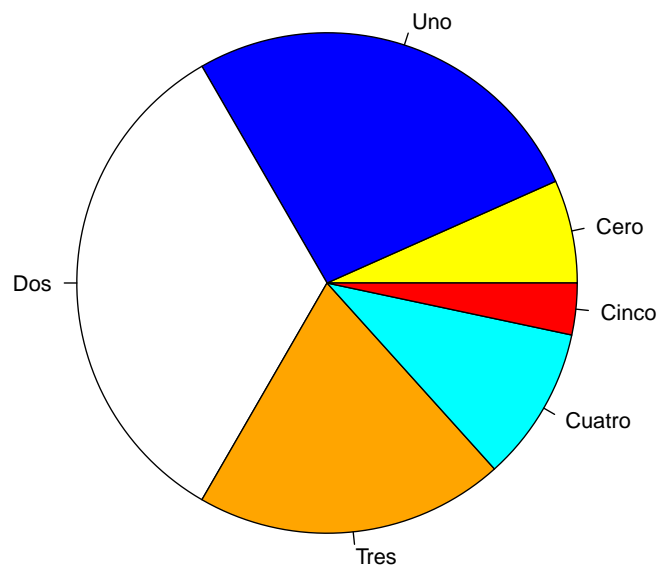


Numero Hijos

Agosto-2012

```
names(fab) = c("Cero", "Uno", "Dos", "Tres", "Cuatro", "Cinco")
pie(fab, main="Grfico de pastel", xlab="X = Nmero Hijos\n", col=c("yellow", "blue",
"white", "orange", "cyan", "red"))
```

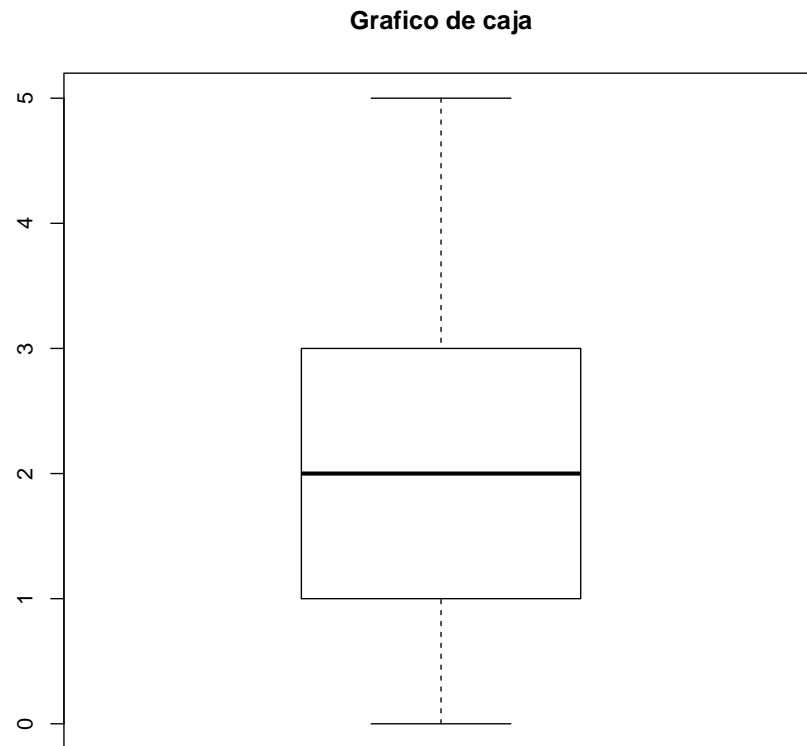
Gráfico de pastel



X = Número Hijos

Agosto-2012

```
boxplot(X, main="Grafico de caja", ylab="Numero de hijos\n")
```



```
boxplot(X, main="Grafico de caja", xlab=" Nmero de hijos\n", plot=TRUE, border="red", col="yellow")
```


Grafico de caja

