Script_2.R

Usuario

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```
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# Matricula
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#


dbh <- c(16.5, 25.3, 22.1, 17.2, 16.1, 8.1, 34.3, 5.4, 5.7, 11.2, 24.1,
             14.5, 7.7, 15.6, 15.9, 10, 17.5, 20.5, 7.8, 27.3, 9.7, 6.5,
             23.4, 8.2, 28.5, 10.4, 11.5, 14.3, 17.2, 16.8)
length(dbh)

## [1] 30

# Medidas de tendencia central ----------------------------------------
--

# Media

sum(dbh)/length(dbh)

## [1] 15.64333

# Mediana

median(dbh)

## [1] 15.75

# Media geometrica

exp(mean(log(dbh)))

## [1] 13.93962

# Moda

moda = function(x)
{
m1 <- sort(table(x), decreasing = TRUE)
moda <- names(m1[m1==m1[1]])
moda <- as.numeric(moda)
return(moda)
}
```

```r
# Medidas de dispersion ----------------------------------------------
--

# Rango

range(dbh)

## [1]  5.4 34.3

# Varianza (S^2)

var(dbh)

## [1] 55.48599

# Desviacion estandar (s)sd

sd(dbh)

## [1] 7.448892

sqrt(var(dbh)) # Obtener la raiz cuadrada de la varianza sd

## [1] 7.448892

# Funcion fivenum
fivenum(dbh)

## [1]  5.40  9.70 15.75 20.50 34.30

# Coeficiente de variacion (CV %)
100*sd(dbh) / mean(dbh)

## [1] 47.61704

# Representacion grafica  --------------------------------------------
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# Grafica de Boxplot o de cajas
boxplot(dbh, horizontal = TRUE, col = "blue", main = "Grafica de boxplot"
, ylab = "Diametro (cm")
```

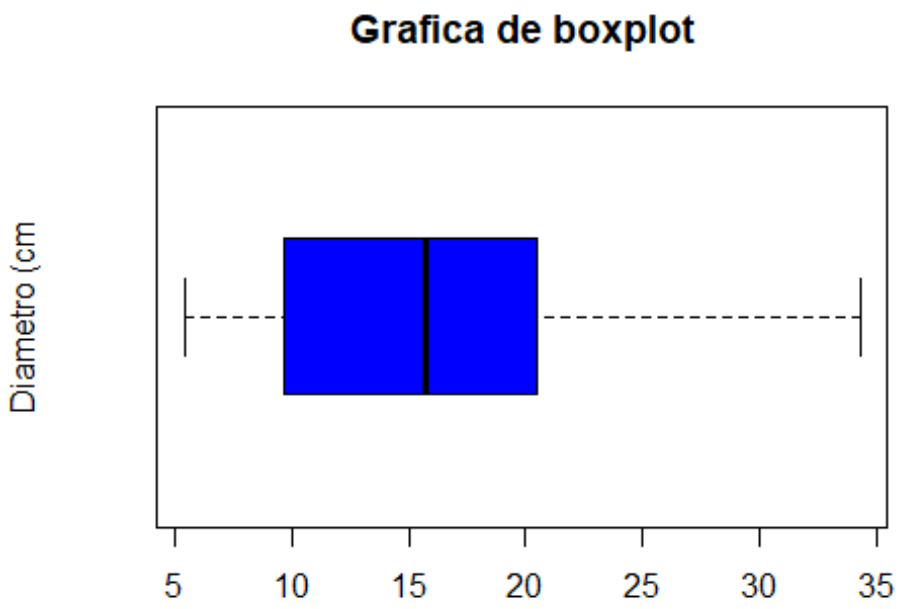


```
# Grafica de Tallo y hoja (stem)
stem(dbh, scale= 3)

##
##   The decimal point is at the |
##
##    5 | 47
##    6 | 5
##    7 | 78
##    8 | 12
##    9 | 7
##   10 | 04
##   11 | 25
##   12 |
##   13 |
##   14 | 35
##   15 | 69
##   16 | 158
##   17 | 225
##   18 |
##   19 |
##   20 | 5
##   21 |
##   22 | 1
##   23 | 4
##   24 | 1
##   25 | 3
```

```
##    26 |
##    27 | 3
##    28 | 5
##    29 |
##    30 |
##    31 |
##    32 |
##    33 |
##    34 | 3

# Grafica de histograma
hist(dbh, main = "Histogram", xlab = "Diametro (cm)", ylab = "Frecuencia"
,
     ylim = c(0,10), col = "green")
```