

scripts_1.R

acile

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```
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#9 de febrero del 2023  
#sesion 1 estadistica scripts
```

```
# Primera sesión -----
```

```
dbh <- 15  
h <- 8  
#multiplicación  
dbh*h
```

```
## [1] 120
```

```
dbh <- c(12, 8, 7, 5, 11, 13, 16, 21, 8, 16)  
  
dbh*h
```

```
## [1] 96 64 56 40 88 104 128 168 64 128
```

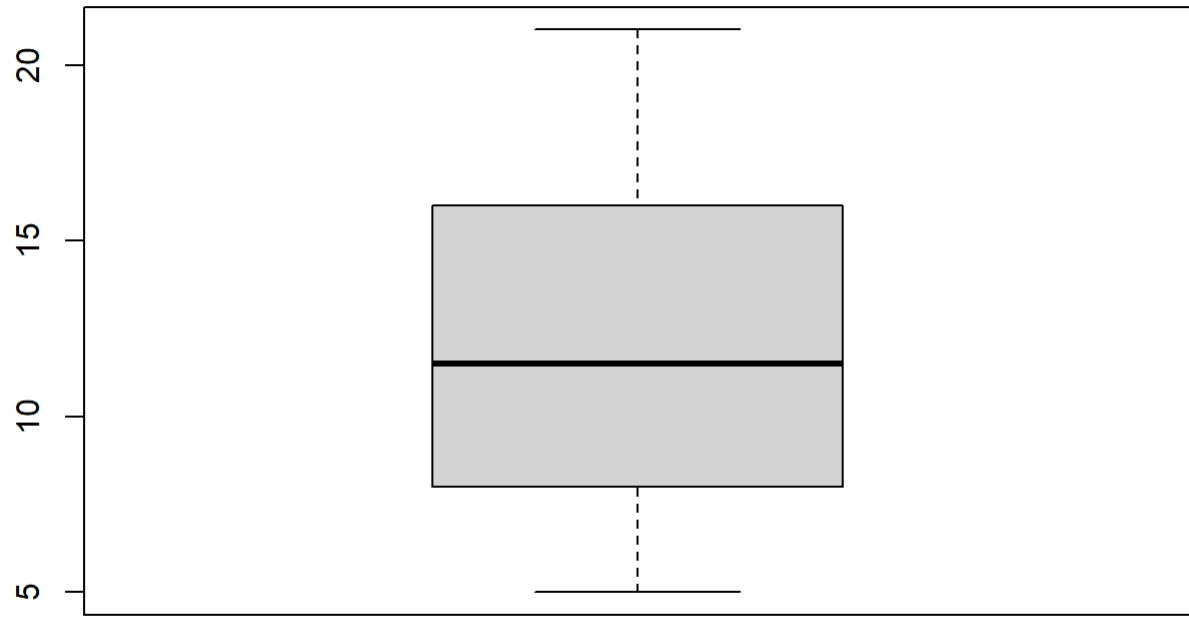
```
h <- c(8, 3, 2.5, 2, 4.7, 5.8, 7, 11, 2.4, 7.2)  
dbh*h
```

```
## [1] 96.0 24.0 17.5 10.0 51.7 75.4 112.0 231.0 19.2 115.2
```

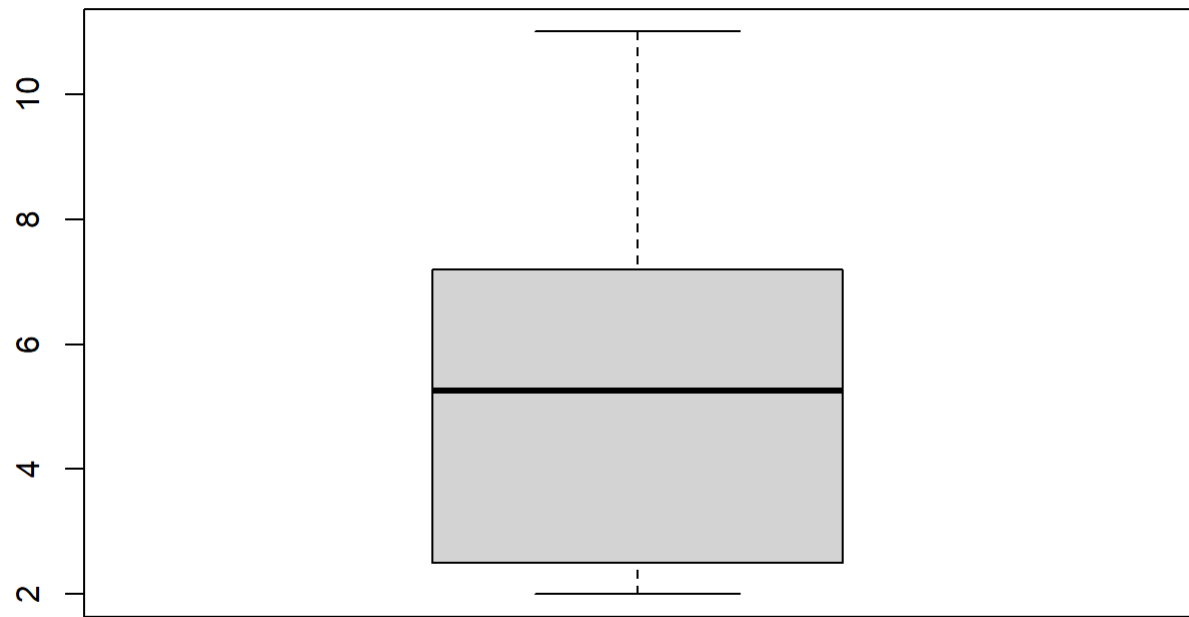
```
# graficas -----
```

```
#boxplot
```

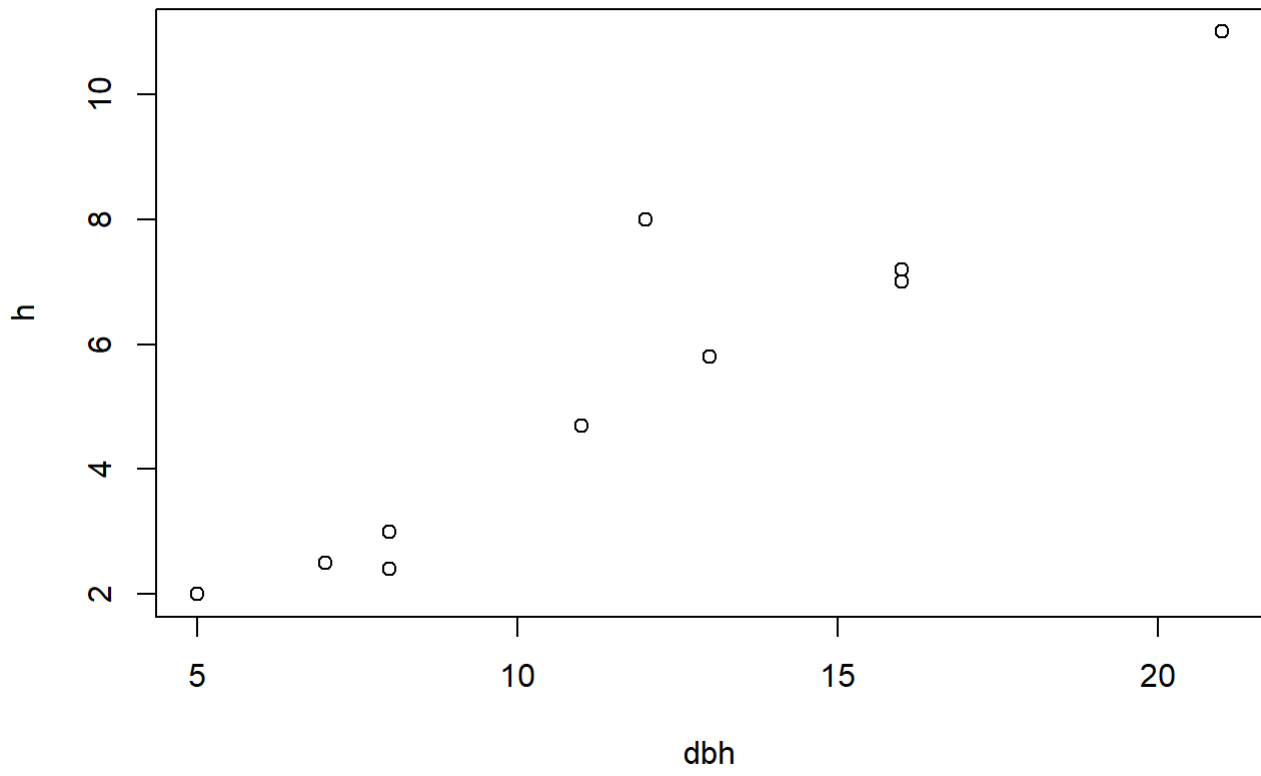
```
boxplot(dbh)
```



```
boxplot(h)
```

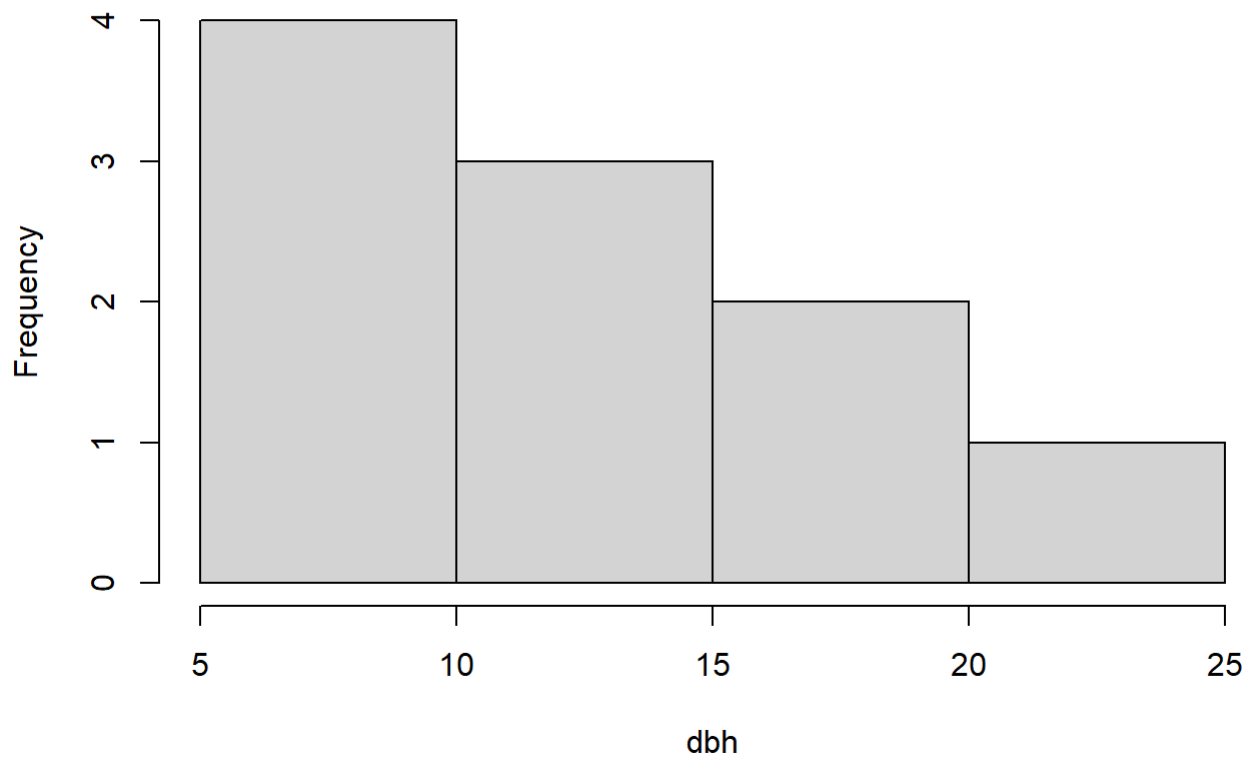


```
plot(dbh, h)
```



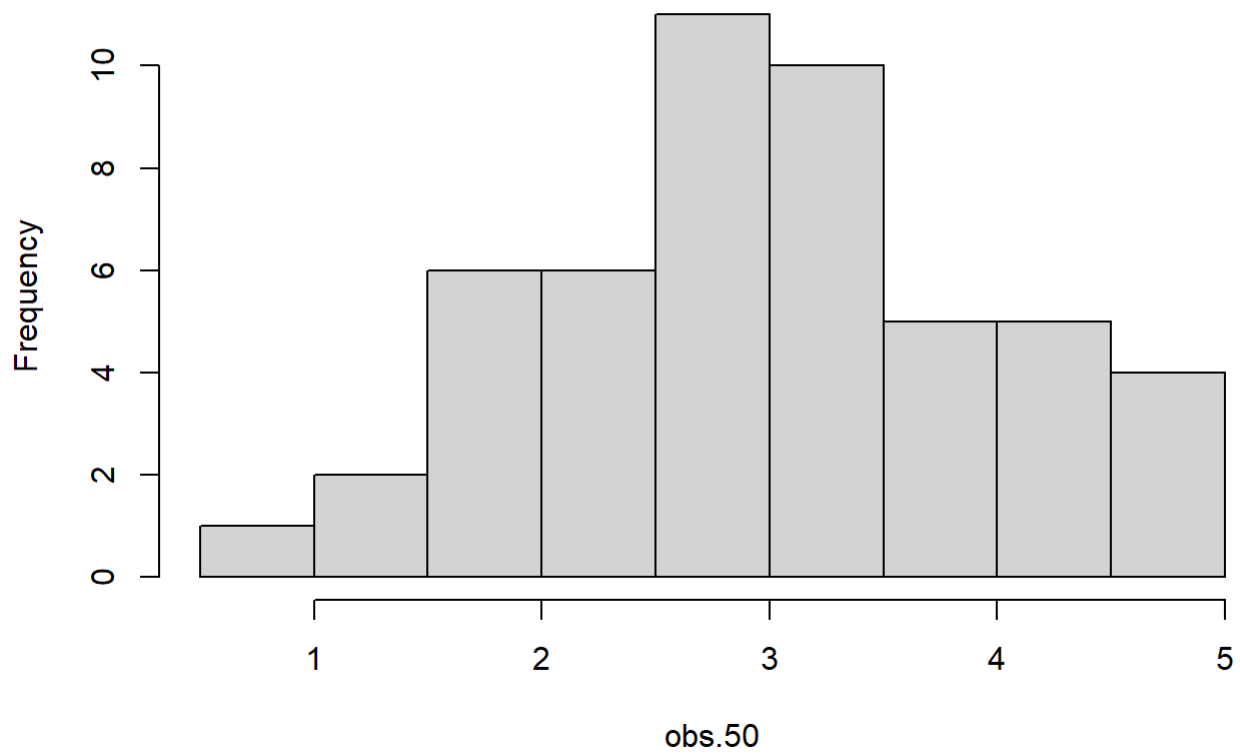
```
hist(dbh)
```

Histogram of dbh



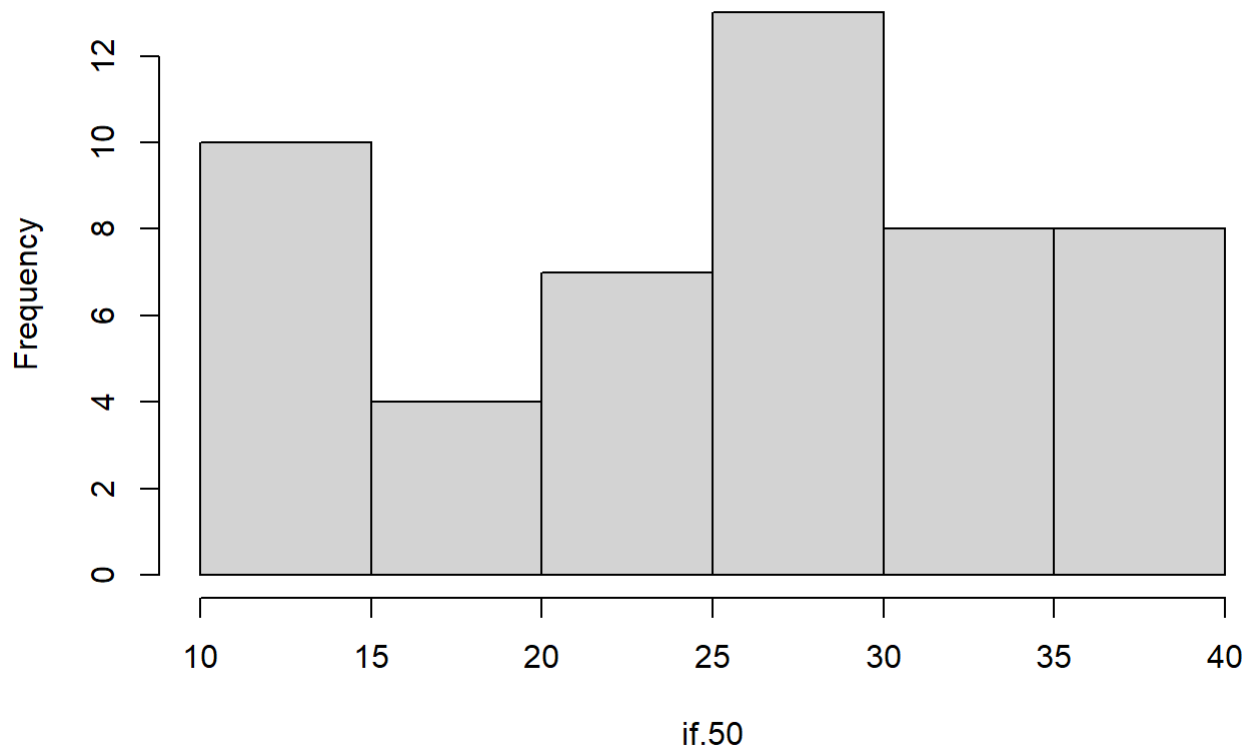
```
set.seed(13)
?rnorm
obs.50 <- rnorm(50, mean = 3)
hist(obs.50)
```

Histogram of obs.50



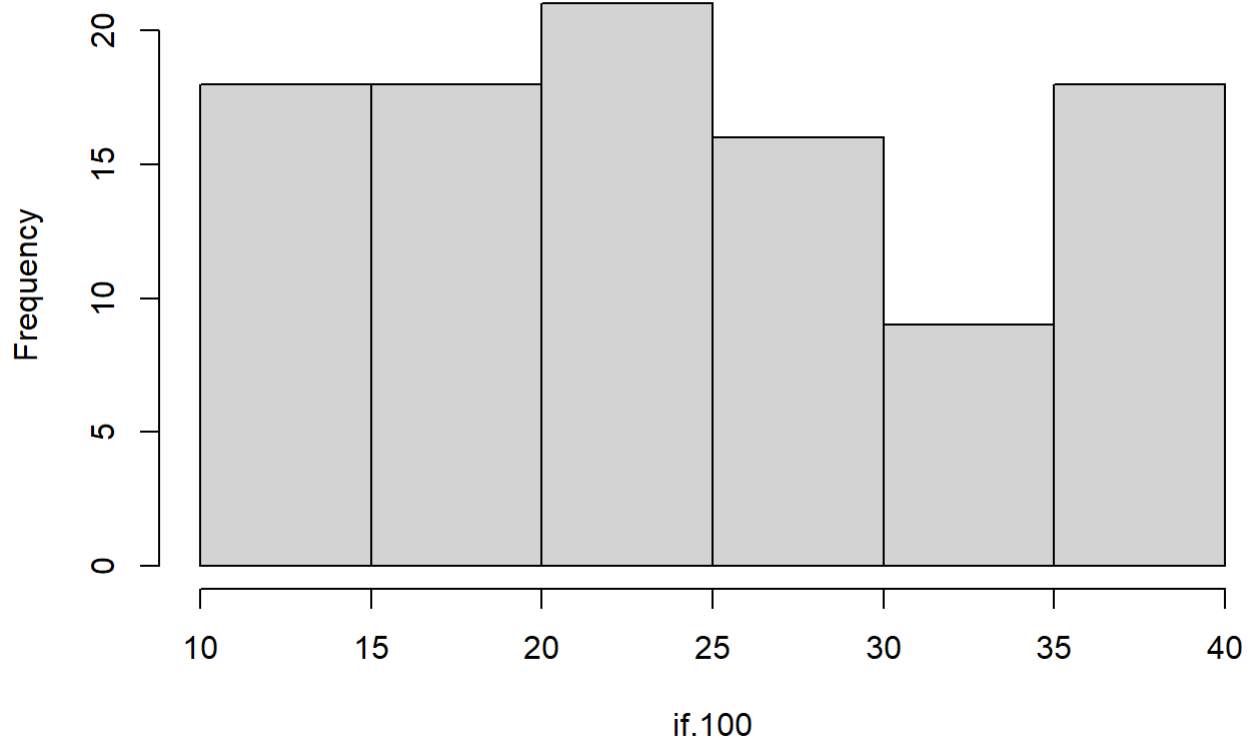
```
set.seed(13)
if.50 <- runif(50, min = 10, max = 40)
hist(if.50)
```

Histogram of if.50



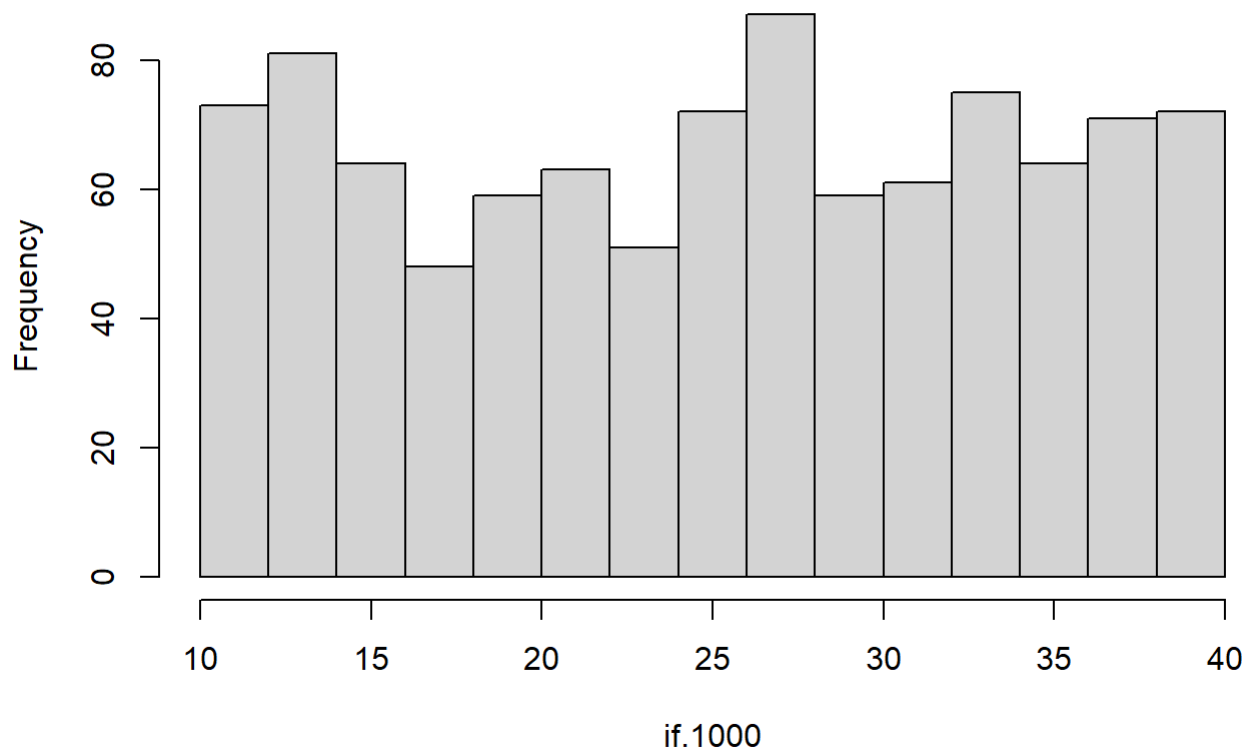
```
if.100 <- runif(100, min = 10, max = 40)
hist(if.100)
```

Histogram of if.100



```
if.1000 <- runif(1000, min = 10, max = 40)
hist(if.1000)
```


Histogram of if.1000

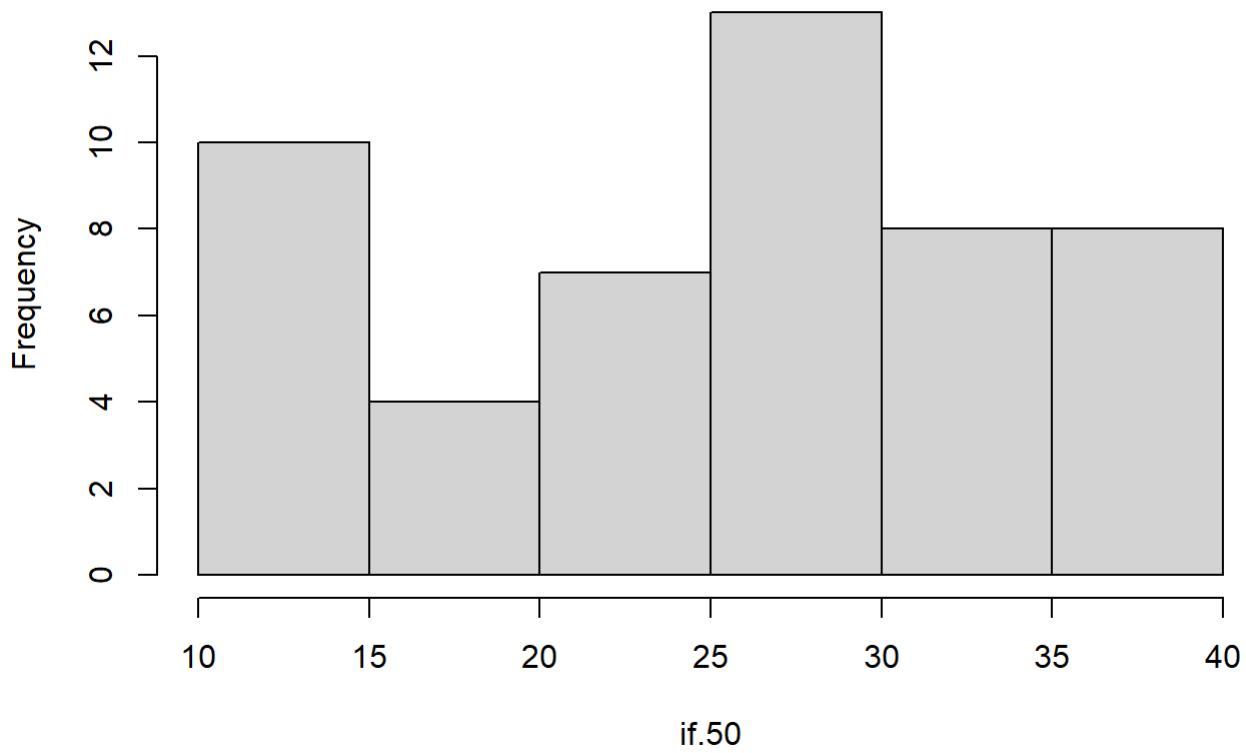


```
stem(if.50)
```

```
##
## The decimal point is 1 digit(s) to the right of the |
##
## 1 | 0112333344
## 1 | 77
## 2 | 001122344
## 2 | 666778888999
## 3 | 000012334
## 3 | 66678899
```

```
hist(if.50)
```

Histogram of if.50



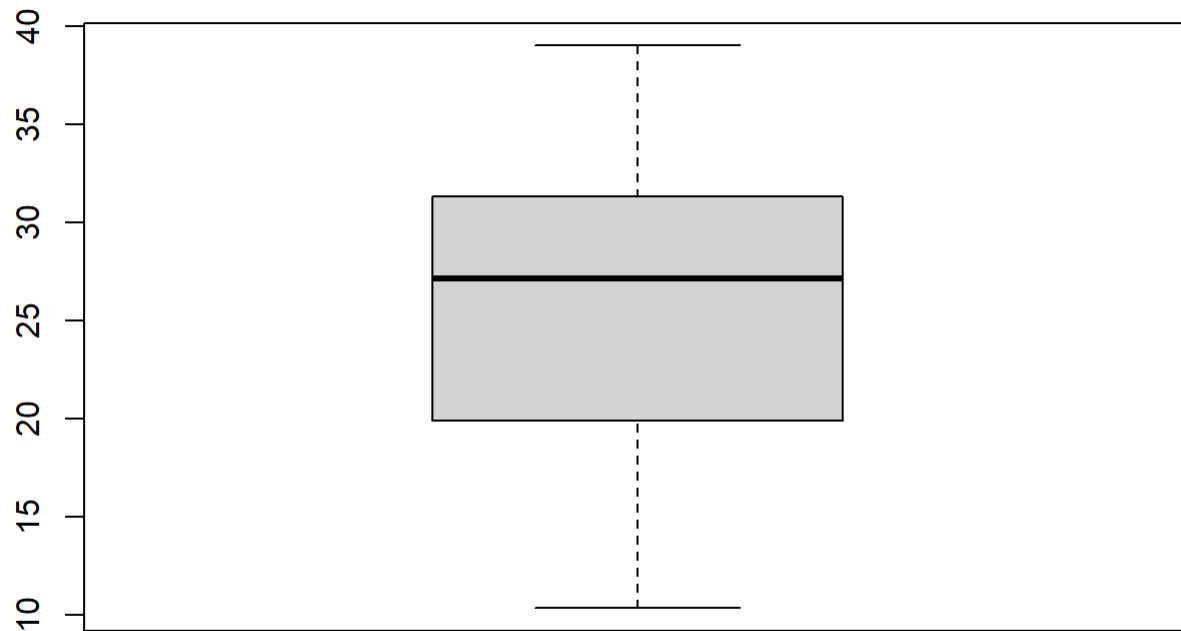
```
# Restricciones -----  
  
#trabajar con datos del objeto if.50  
  
mean(if.50)
```

```
## [1] 25.3432
```

```
fivenum(if.50)
```

```
## [1] 10.32800 19.87381 27.10863 31.30967 39.00500
```

```
boxplot(if.50)
```



```
#igual a ==
#diferente a !=
#igual o mayor
#igual o menor
#mayor que
#menor que

if.50<= median(if.50)
```

```
## [1] FALSE TRUE TRUE TRUE FALSE TRUE FALSE FALSE FALSE TRUE FALSE FALSE
## [13] FALSE TRUE FALSE TRUE TRUE FALSE FALSE FALSE TRUE TRUE FALSE TRUE
## [25] TRUE FALSE TRUE TRUE TRUE FALSE TRUE TRUE FALSE FALSE TRUE TRUE
## [37] TRUE TRUE FALSE TRUE FALSE TRUE FALSE FALSE FALSE FALSE TRUE TRUE
## [49] FALSE FALSE
```

```
dbh.50 <- subset(if.50, if.50 <= median(if.50))
dbh.up50 <- subset(if.50, if.50 >= median(if.50))
dbh.up30 <- subset(if.50, if.50 >30)
dbh.up30
```

```
## [1] 31.30967 38.86194 32.93194 36.20147 36.35113 36.71677 35.96354 30.41571
## [9] 30.33739 37.56123 34.26281 32.76192 39.00500 37.56994 31.97295 30.41875
```

```
mean(dbh.up30)
```

```
## [1] 34.54013
```

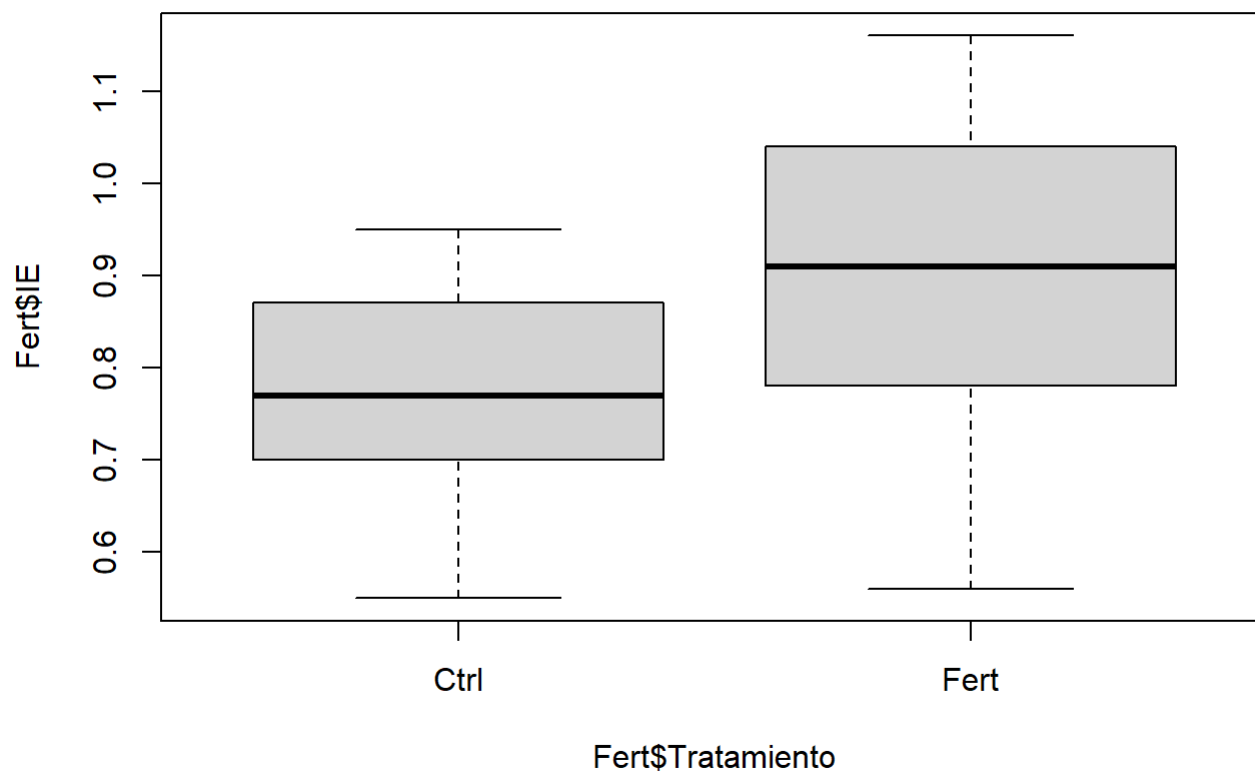
```
sd(dbh.up30)
```

```
## [1] 3.100909
```

```
# imprtar datos -----
```

```
#función read.csv
```

```
Fert <- read.csv("vivero.csv", header = TRUE)  
boxplot(Fert$IE ~ Fert$Tratamiento)
```



```
xlab = "Tratamientos"  
ylab = "índice de Esbeltez"  
col = "pink"  
main = " vivero Bosque Escuela"  
las = 1  
ylim = c(0.4, 1.4)
```