

Laboratorio_5.R

Usuario

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```
# Laboratorio 5
# 10/09/2025
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# Prueba de t de una muestra con media teoretica

costal <- c(87.7, 80.01, 77.28, 78.76, 81.52, 74.2, 80.71, 79.5, 77.87,
81.94, 80.7,
            82.32, 75.78, 80.19, 83.91, 79.4, 77.52, 77.62, 81.4, 74.89,
82.95,
            73.59, 77.92, 77.18, 79.83, 81.23, 79.28, 78.44, 79.01,
80.47, 76.23,
            78.89, 77.14, 69.94, 78.54, 79.7, 82.45, 77.29, 75.52, 77.21,
75.99,
            81.94, 80.41, 77.7)
mean(costal)          # Media de Los datos

## [1] 78.91068

summary(costal)       # Resumen estadistico

##    Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##  69.94  77.26   78.95   78.91  80.70   87.70

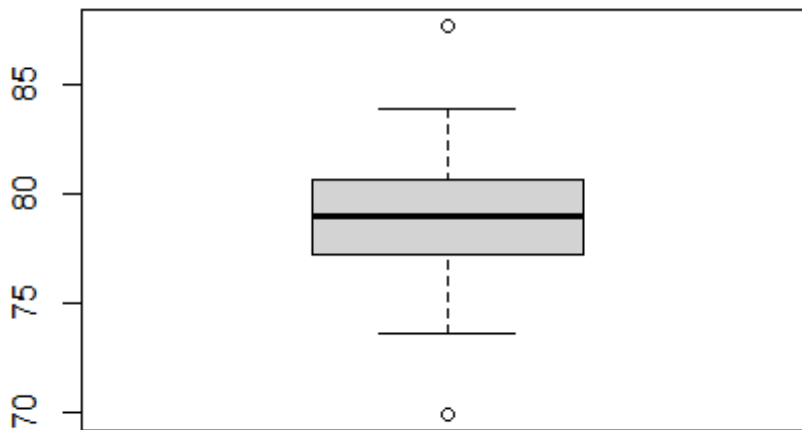
var(costal)           # Varianza de Los datos

## [1] 9.339276

sd(costal)             # Desviacion estandar de Los datos

## [1] 3.056023

# Boxplot
boxplot(costal)
```



```
# Prueba de t de una muestra con una media teoretica
t.test(costal, mu=80) # Media menor a 80 kg

##
##  One Sample t-test
##
## data:  costal
## t = -2.3644, df = 43, p-value = 0.02264
## alternative hypothesis: true mean is not equal to 80
## 95 percent confidence interval:
##  77.98157 79.83980
## sample estimates:
## mean of x
##  78.91068

# Se acepta hipotesis nula
```