

Clase-3.R

Usuario1

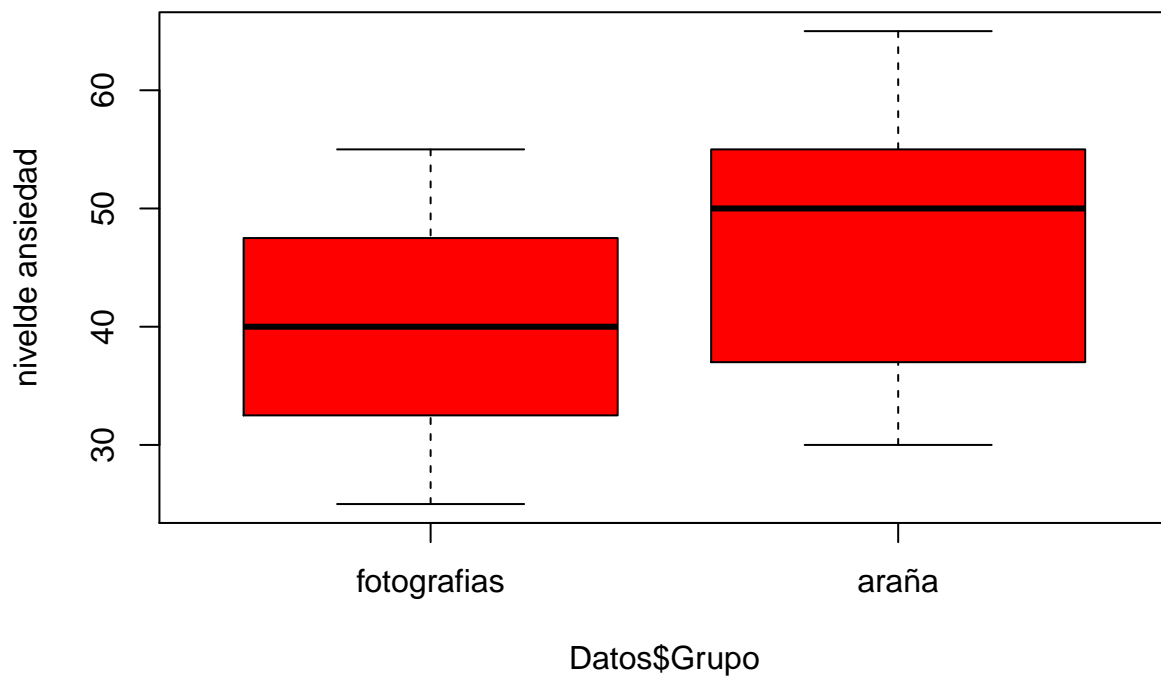
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```
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# 07/08/19  
# Clase 3
```

```
Grupo<- gl(2, 12,labels = c("fotografias", "araña"))  
Ansiedad<- c(30, 35, 45, 40, 50, 35, 55, 25, 30, 45, 40, 50, 40, 35, 50, 55,  
             65, 55, 50, 35, 30, 50, 60, 39)  
  
Datos <- data.frame(Gruo, Ansiedad)  
head(Datos)
```

```
##      Gruo Ansiedad  
## 1 fotografias      30  
## 2 fotografias      35  
## 3 fotografias      45  
## 4 fotografias      40  
## 5 fotografias      50  
## 6 fotografias      35
```

```
boxplot(Datos$Ansiedad ~ Datos$Gruo, col= "red", ylab = "nivelde ansiedad")
```



```

length("fotografias")

## [1] 1
length("araña")

## [1] 1
shapiro.test(Datos$Ansiedad)

##
## Shapiro-Wilk normality test
##
## data: Datos$Ansiedad
## W = 0.96282, p-value = 0.4977
bartlett.test(Datos$Ansiedad, Datos$Grupo)

##
## Bartlett test of homogeneity of variances
##
## data: Datos$Ansiedad and Datos$Grupo
## Bartlett's K-squared = 0.30702, df = 1, p-value = 0.5795
library(pastecs)
by(Datos$Ansiedad, Datos$Grupo, stat.desc, basic= FALSE, norm =TRUE)

## Datos$Grupo: fotografias
##      median      mean      SE.mean CI.mean.0.95      var
## 40.0000000 40.0000000 2.6827168 5.9046200 86.3636364
##      std.dev      coef.var      skewness      skew.2SE      kurtosis
## 9.2932038 0.2323301 0.0000000 0.0000000 -1.3939289
##      kurt.2SE      normtest.W      normtest.p
## -0.5656047 0.9650165 0.8522870
## -----
## Datos$Grupo: araña
##      median      mean      SE.mean CI.mean.0.95      var
## 50.000000000 47.000000000 3.183765638 7.007420922 121.636363636
##      std.dev      coef.var      skewness      skew.2SE      kurtosis
## 11.028887688 0.234657185 -0.005590699 -0.004386224 -1.459758279
##      kurt.2SE      normtest.W      normtest.p
## -0.592315868 0.948872904 0.620569431
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)
n <- length(costal)
n

## [1] 44
costa.media <- mean(costal)
costa.media

## [1] 78.91068

```

```

costa.sd <- sd(costal)
costa.sd

## [1] 3.056023

costase <- costa.sd / sqrt (n)
costase

## [1] 0.4607128

costa.t <- (costa.media -80) / costase
costa.t

## [1] -2.364419

pt(costa.t, df = n-1)

## [1] 0.01132175

t.test(costal, mu= 80,alternative = "less")

##
## One Sample t-test
##
## data: costal
## t = -2.3644, df = 43, p-value = 0.01132
## alternative hypothesis: true mean is less than 80
## 95 percent confidence interval:
##      -Inf 79.68517
## sample estimates:
## mean of x
## 78.91068

```