

ANEXO 1

Script R

```
# BLOQUE TRANSVERSAL

#=====

# Leemos el archivo excel con los datos

library(readxl)

path <- 'C:/Users/eteix/Desktop/'

data <- data.frame(read_excel(paste0(path, 'DadesR.xlsx')))
```

Visualizamos la tabla

```
View(data)
```

Creamos subtablas separadas por procesador

```
Ryzen5 <- subset(data, Procesador == "AMD Ryzen 5 5600X 3.7GHz")
Ryzen7 <- subset(data, Procesador == "AMD Ryzen 7 5800X 3.8GHz")
```

Descriptiva variables continuas

```
# Ryzen 5

summary(Ryzen5$Score)
```

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
7611	7842	8005	7957	8064	8212

```
var(Ryzen5$Score) 24790.23
sd(Ryzen5$Score) 157.4491
hist(Ryzen5$Score)
boxplot(Ryzen5$Score)
```

Ryzen 5/Benchmark

```
#Cine Bench

summary(Ryzen5$Cine)
```

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
9899	10308	10862	10680	11009	11250

```
var(Ryzen5$Cine) 183091.1
sd(Ryzen5$Cine) 427.8914
hist(Ryzen5$Cine)
boxplot(Ryzen5$Cine)
```

```
#Geek Bench

summary(Ryzen5$Geek)
```

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
7799	8126	8454	8355	8548	8806

```
var(Ryzen5$Geek) 84628.69
sd(Ryzen5$Geek) 290.9101
hist(Ryzen5$Geek)
boxplot(Ryzen5$Geek)
```

```
#CPU.Z Bench
summary(Ryzen5$CPU.Z)
```

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
4332	4643	4780	4836	4998	5521

```
var(Ryzen5$CPU.Z) 69829.96
sd(Ryzen5$CPU.Z) 264.2536
hist(Ryzen5$CPU.Z)
boxplot(Ryzen5$CPU.Z)
```

```
#Ryzen 7
```

```
summary(Ryzen7$Score)
```

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
10396	11031	11165	11187	11380	11830

```
var(Ryzen7$Score) 104556.4
sd(Ryzen7$Score) 323.3518
hist(Ryzen7$Score)
boxplot(Ryzen$Score)
```

```
#Ryzen 7/Benchmark
```

```
#Cine Bench
summary(Ryzen7$Cine)
```

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
13254	14846	15240	15020	15347	15789

```
var(Ryzen7$Cine) 370791.8
sd(Ryzen7$Cine) 608.9268
hist(Ryzen7$Cine)
boxplot(Ryzen7$Cine)
```

```
#Geek Bench
summary(Ryzen7$Geek)
```

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
10633	11288	11461	11658	12115	12986

```
var(Ryzen7$Geek) 388843
sd(Ryzen7$Geek) 623.5728
hist(Ryzen7$Geek)
```

```
boxplot(Ryzen7$Geek)
```

```
#CPU.Z Bench
```

```
summary(Ryzen7$CPU.Z)
```

Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
6154	6510	6663	6884	7132	8354

```
var(Ryzen7$CPU.Z) 307002.4
```

```
sd(Ryzen7$CPU.Z) 554.0779
```

```
hist(Ryzen7$CPU.Z)
```

```
boxplot(Ryzen7$CPU.Z)
```

#Comprovacio de la "Normalitat" de les mostres

```
#Ryzen 5
```

```
par(mfrow=c(,))
```

```
hist(Ryzen5$Score)
```

```
qqnorm(Ryzen5$Score)
```

```
qqline(Ryzen5$Score)
```

```
#Ryzen 7
```

```
par(mfrow=c(2,1))
```

```
hist(Ryzen7$Score)
```

```
qqnorm(Ryzen7$Score)
```

```
qqline(Ryzen7$Score)
```

```
#Test "Normalidad"
```

```
>Shapiro.test(Ryzen5$Score) w = 0.94864, p-value = 0.1831
```

```
>Shapiro.test(Ryzen7$Score) w = 0.96546, p-value = 0.4655
```

#OBJECTIU 1

```
#Ryzen 7 mejor que Ryzen 5?
```

```
d1 = Ryzen7$Score - Ryzen5$Score
```

```
T = mean(d1) / (sd(d1) / sqrt(length(d1)))
```

```
Pvalue = 2 * (1 - pnorm(t, 0, 1))
```

```
t.test(Ryzen7$Score, Ryzen5$Score, paired = "TRUE")
```

#OBJECTIU 2

```
#El benchmark afecta en las puntuaciones obtenidas?
```

```
par(mfrow = c(1,1))
```

```
boxplot(Ryzen5$Cine, Ryzen5$Geek)
```

```
cor(Ryzen5$Cine, Ryzen5$Geek) -0.3095971
```

```
boxplot(Ryzen5$Geek, Ryzen5$CPU.Z)  
cor(Ryzen5$Geek, Ryzen5$CPU.Z) -0.4711345
```

```
boxplot(Ryzen5$Cine, Ryzen5$CPU.Z)  
cor(Ryzen5$Cine, Ryzen5$CPU.Z) 0.1550976
```

```
boxplot(Ryzen7$Cine, Ryzen7$Geek)  
cor(Ryzen7$Cine, Ryzen7$Geek) -0.3095971
```

```
boxplot(Ryzen7$Geek, Ryzen7$CPU.Z)  
cor(Ryzen7$Geek, Ryzen7$CPU.Z) -0.4711345
```

```
boxplot(Ryzen5$Cine, Ryzen5$CPU.Z)  
cor(Ryzen5$Cine, Ryzen5$CPU.Z) 0.1550976
```