

4,53

```
1  ### =====  
  ### Màster Universitari en Estadística i Investigació Operativa  
  ### Computación en Estadística y en Optimización  
  ### Test 1 con R (Grupo A): 8.10.2018  
  ### Nombre:  
  ### =====  
  
  ## Ejercicio 1 2,35  
  ## =====  
10 # 1a  
  # --  
  setwd("C:/Users/ruben.lince/Downloads")  
  load("CeoGrATestR1.RData")  
  
  names(decathlon) <- substr(tolower(names(decathlon)), 1, 4) 1, 4 0,15  
  head(decathlon)  
  # 1b  
  # --  
  olymp<-data.frame(decathlon)  
  olymp$Rank<-NULL 0,4  
  olymp$Competition<-NULL (✓)  
  # 1c  
  # --  
  olymp<-olymp[order(names(olymp)),]  
  head(olymp) 0,05  
  # 1d sum  
  # --  
  length(which(olymp$Long.jump>7.5)) (✓) 0,35  
30 # 1e  
  # --  
  emp<-duplicated(olymp$Points)  
  sum(emp) (✓) was any(), no sum() 0,3  
  
  # 1f  
  # --  
  which.max(olymp$Discus)  
  olymp$X1500m[which.max(olymp$Discus)] (✓) 1/2 max(...) 0,5  
40 # 1g  
  # --  
  weekdays(olymp$birt) (✓) 1/3 aplican table a weekdays 0,25  
  max(weekdays(olymp$birt)) Surcar máximo.  
  sum(weekdays(olymp$birt)=="Wednesday") 0,25  
  # 1h  
  # --  
  corr<-round(corr(olymp[, c("Discus", "High.jump", "Javeline", "Long.jump", "Pole.vault", "Sh  
50 # 1i  
  # --  
  which.max(abs(corr)<1) (✓) 1/2  
  max(abs(corr<1)) 0,1  
  corr[2]  
  
  ## Ejercicio 2 1,5  
  ## =====  
60 boxplot(decathlon$poin~ decathlon$comp) (✓) beeswarm  
  windows()  
  boxplot(decathlon$poin~ decathlon$comp, col = 2:4, xlab= "Competition", ylab="Points", mai:  
  beeswarm(decathlon$poin~ decathlon$comp, col=1, add=TRUE, pch = 16, bty = "n")  
  savePlot("Boxplots", type="jpg")  
  omx<-max(decathlon$points) (✓) NO funciona sin library()  
  dmax<-max(decathlon$points)  
  
  wmax<-(which(histo$counts==max(histo$counts)))  
  text(histo$mids[wmax], hmax, paste("N=", hmax), adj=c(.5, .1), font=2)  
  (✓) Nombre del Mejor atleta
```

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70 ## Ejercicio 3 0.77
  ## =====
  dfr[dfr == "*"] <- NA
  mode(dfr)
  df <- as.data.frame(dfr) as.character(...)
  str(df)
  df$x <- as.numeric(dfr$x)
  dfr$x <- as.numeric(dfr$x)
  dfr$y <- as.numeric(dfr$y)
80 save(dfr, file = "dfr.RDs")
  // num (" ", " ", " ", ...)
```