05\_prueba\_p\_una\_muestra\_correlacion.R

Usuario

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# Conjunto de datos para correlacion  
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# Crear la base de datos  
  
x <- c(10.0,8.0,13.0,9.0,11.0,14.0,6.0,4.0,12.0,7.0,5.0)  
y <- c(9.14,8.14,8.74,8.77,9.26,8.10,6.13,3.10,9.13,7.26,4.74)  
  
# Crear un data.frame con las variables x and y  
  
d2 <- data.frame(x,y)  
d2

## x y  
## 1 10 9.14  
## 2 8 8.14  
## 3 13 8.74  
## 4 9 8.77  
## 5 11 9.26  
## 6 14 8.10  
## 7 6 6.13  
## 8 4 3.10  
## 9 12 9.13  
## 10 7 7.26  
## 11 5 4.74

#Estadisticas descriptivas   
  
mean(d2$x); var(d2$x)

## [1] 9

## [1] 11

mean(d2$y); var(d2$y)

## [1] 7.500909

## [1] 4.127629

# x  
# mean: 9  
# var: 11  
# y  
# mean: 7.500909  
# var: 4.127629  
  
# Aplicar correlacion   
  
cor.test(d2$x, d2$y)

##   
## Pearson's product-moment correlation  
##   
## data: d2$x and d2$y  
## t = 4.2386, df = 9, p-value = 0.002179  
## alternative hypothesis: true correlation is not equal to 0  
## 95 percent confidence interval:  
## 0.4239389 0.9506402  
## sample estimates:  
## cor   
## 0.8162365

# Cor: 0.8162365  
  
# Cuarteto de ANSCOMBE   
  
# Grafica   
  
plot(d2$x, d2$y,  
 pch= 19,  
 xlab = "Valor x",  
 ylab = "Valor y")

