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
```

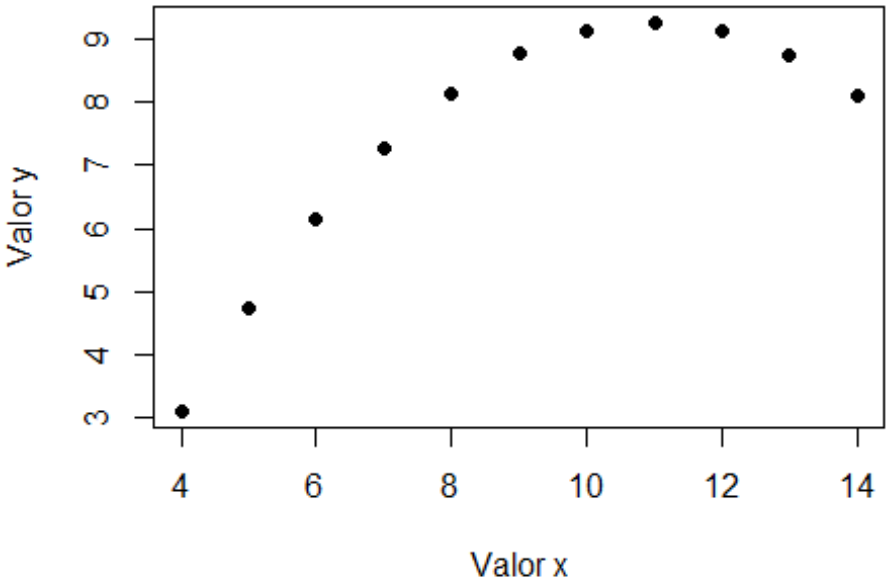
```
mean(d2$y); var(d2$y)
```

```
## [1] 7.500909
```

```
## [1] 4.127629
```

```
# x
# mean: 9
```

```r
# 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")
```


Valor y
3
4
5
6
7
8
9
4
6
8
10
12
14
Valor x