clase_6.R

52618

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```
#cipriano guerrero cabrera
#clase 6

# instalar libreria gabminder ------------------------------------------

library(repmis)
```

```
## Registered S3 method overwritten by 'R.oo':
##   method        from
##   throw.default R.methodsS3
```

```
edad <- source_data("https://www.dropbox.com/s/nxoijhgmutuho0s/datos_control_Rascon.csv?dl=1")
```

```
## Downloading data from: https://www.dropbox.com/s/nxoijhgmutuho0s/datos_control_Rascon.csv?dl=1
```

```
## SHA-1 hash of the downloaded data file is:
## 5db2352e6fda9922f4feda0950294d01ac4f7861
```

```
edad$SP<-factor(edad$SP)
str(edad)
```

```
## 'data.frame':    60 obs. of  4 variables:
##  $ arbol: int  1 2 3 4 5 6 7 8 9 10 ...
##  $ DAP  : num  27.4 19.5 20 22 34 33.1 32 10 14 11 ...
##  $ EDAD : int  59 29 24 40 50 44 44 17 15 16 ...
##  $ SP   : Factor w/ 2 levels "arizonica","durangensis": 1 1 1 1 1 1 1 1 1 1 ...
```

```
# separar factor -------------------------------------------------------

ariz<- subset(edad,SP=="arizonica")

ariz.lm<-lm(ariz$EDAD~ariz$DAP)

dura<-subset(edad,SP=="durangensis")


# regresion dos factores -----------------------------------------------

cov.edad<-lm(edad$EDAD~edad$DAP+edad$SP)
summary(cov.edad)
```

```
##
## Call:
## lm(formula = edad$EDAD ~ edad$DAP + edad$SP)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -30.844  -8.515  -1.731   7.473  38.741
##
## Coefficients:
```

```
##                    Estimate Std. Error t value Pr(>|t|)
## (Intercept)         -7.6573     5.2903  -1.447    0.153
## edad$DAP             1.9861     0.2342   8.480 1.10e-11 ***
## edad$SPdurangensis  19.0629     4.2942   4.439 4.19e-05 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 15.03 on 57 degrees of freedom
## Multiple R-squared:  0.7269, Adjusted R-squared:  0.7174
## F-statistic: 75.87 on 2 and 57 DF,  p-value: < 2.2e-16
```

```r
plot(edad$DAP[edad$SP=="arizonica"],edad$EDAD[edad$SP=="arizonica"],
       col="red", pch=16, xlim=c(0,50), ylim = c(0,130))

abline(cov.edad$coefficients[1],cov.edad$coefficients[2], col="blue")

text(30,20,"Ya=-7.65+1.98*x")
points(edad$DAP[edad$SP == "durangencis"], edad$EDAD[edad$SP == "surangencis"],
       col= "blue", pch="d")
abline(cov.edad$coefficients[1]+cov.edad$coefficients[3],
       cov.edad$coefficients[2],col="blue", lty="dashed")
text(19,100, "Yd=11.41+1.98")
```