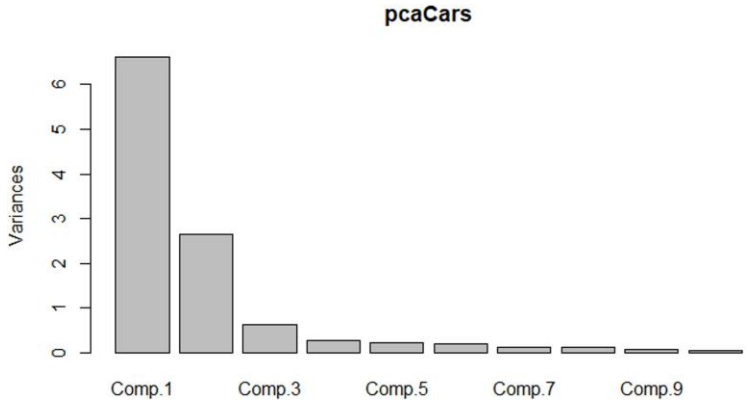
UNIVERSIDAD AUTÓNOMA DEL ESTADO DE MÉXICO
FACULTAD DE CIENCIAS.
LICENCIATURA EN BIOTECNOLOGÍA
BIOINFORMÁTICA AVANZADA

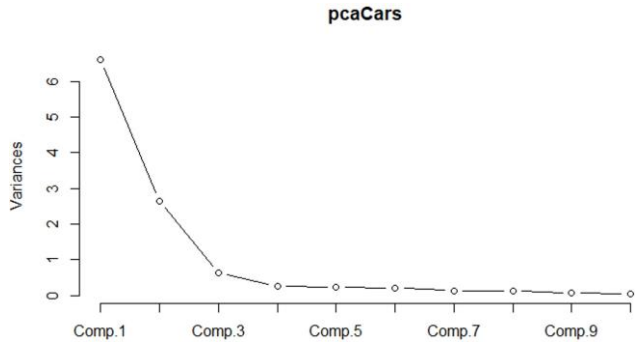
TAREA PCR

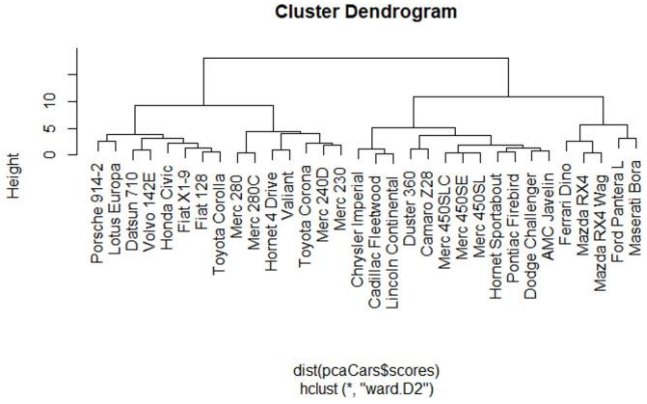
LÓPEZ CRUZ NANCY

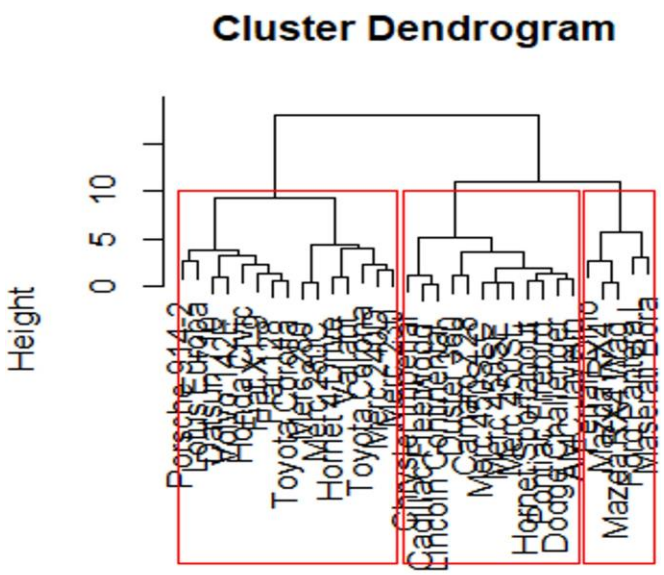
Comandos	Imágenes
> summary(mtcars) > pcaCars <- princomp(mtcars, cor = TRUE) > names(pcaCars) > summary(pcaCars) > plot(pcaCars) > plot(pcaCars, type = "l") > carsHC <- hclust(dist(pcaCars$scores), method ="ward.D2") > plot(carsHC) > carsClusters <- cutree(carsHC, k = 3) > plot(carsHC) > rect.hclust(carsHC, k=3, border="red") > carsDf <- data.frame(pcaCars$scores, "cluster" =factor(carsClusters)) > str(carsDf) > install.packages("ggplot2") > install.packages("ggrepel") > library(ggplot2) > library(ggrepel) > ggplot(carsDf,aes(x=Comp.1, y=Comp.2)) + + geom_text_repel(aes(label = rownames(carsDf))) + + theme_classic() + + geom_hline(yintercept = 0, color = "gray70") + + geom_vline(xintercept = 0, color = "gray70") + + geom_point(aes(color = cluster), alpha = 0.55, size = 3) + + xlab("PC1") + + ylab("PC2") + + xlim(-5, 6) + + ggtitle("PCA plot of Cars")	

RESULTADOS


pcaCars
Variances
0
1
2
3
4
5
6
Comp.1
Comp.3
Comp.5
Comp.7
Comp.9


pcaCars
Variances
0
1
2
3
4
5
6
Comp.1
Comp.3
Comp.5
Comp.7
Comp.9


Cluster Dendrogram
Height
0
5
10
Porsche 914-2
Lotus Europa
Datsun 710
Volvo 142E
Honda Civic
Fiat X1-9
Fiat 128
Toyota Corolla
Merc 280
Merc 280C
Hornet 4 Drive
Valiant
Toyota Corona
Merc 240D
Merc 230
Chrysler Imperial
Cadillac Fleetwood
Lincoln Continental
Duster 360
Camaro Z28
Merc 450SLC
Merc 450SE
Merc 450SL
Hornet Sportabout
Pontiac Firebird
Dodge Challenger
AMC Javelin
Ferrari Dino
Mazda RX4
Mazda RX4 Wag
Ford Pantera L
Maserati Bora
dist(pcaCars$scores)
hclust (*, "ward.D2")



dist(pcaCars$scores)
hclust (*, "ward.D2")