library(ggcorrplot)

library(car)

price<-read.csv("C:/Users/DELL/Desktop/price.csv")

# Look at the first 6 observations

head(price)

# Check the dimension

dim(price)

model1 <- lm(price$Price ~price$Sale+price$weight+price$resoloution+price$ppi+price$cpu.core

+price$cpu.freq+price$internal.mem+price$ram+price$battery, data = price)

# Get the model residuals

model\_residuals = model1$residuals

# Plot the result

hist(model\_residuals)

# Plot the residuals

qqnorm(model\_residuals)

# Plot the Q-Q line

qqline(model\_residuals)

# Remove the sale column

reduced\_data <- subset(price, select = -Sale)

# Compute correlation

corr\_matrix = cor(reduced\_data)

# Compute and show the result

ggcorrplot(corr\_matrix, hc.order = TRUE, type = "lower",lab = TRUE)

model2 <- lm(price$Price ~ price$Sale+price$resoloution+price$ppi+price$cpu.core

+price$cpu.freq+price$internal.mem+price$battery, data = price[-c(33,48,75,77),])

price.col <- subset(price, select = -c(price$resoloution,price$weight))

pric <- price[, -which(names(price) %in% c("weight", "resoloution"))]

head(pric)

pric.rem<-pric[-c(33,48),]

model3<-lm(pric.rem$Price~.,data = pric.rem)

summary(model3)

avPlots(model3)

vif(model3)

influenceIndexPlot(model3,grid = T,id=list(n=10,cex=1.5,col="blue"))

influence.measures(model3)

qqPlot(model3)

# Get the model residuals

model\_residuals = model2$residuals

# Plot the result

hist(model\_residuals)

# Plot the residuals

qqnorm(model\_residuals)

# Plot the Q-Q line

qqline(model\_residuals)

# Anova test

anova(model1, model2)

# Print the result of the model

summary(model1)

summary(model2)