***library(car)***

***data<-read.csv("C:/Users/SCLAB - 5/Downloads/Datareg - Datareg.csv")***

***y<-data$y***

***x1<-data$x1***

***x2<-data$x2***

***x3<-data$x3***

***x4<-data$x4***

***x5<-data$x5***

***data<-data.frame(x1,x2,x3,x4,x5,y)***

***pairs(data)***

***fittrial<-lm(y~x1+x2+x3+x4+x5)***

***plot(fittrial$residuals)***

***abline(0,0)***

***qqnorm(fittrial$residuals)***

***qqline(fittrial$residuals)***

***par(mfrow=c(3,3))***

***plot(x1,fittrial$residuals)***

***plot(x2,fittrial$residuals)***

***plot(x3,fittrial$residuals)***

***plot(x4,fittrial$residuals)***

***plot(x5,fittrial$residuals)***

***fit1<-boxTidwell(y~x4+x5+x1,~x2+x3)***

***summary(fittrial)***

***fit1***

***summary(fit1)***

***al1<-fit1$result[3,1]; al4<-fit$result[1,1]; al5<-fit$result[2,1]***

***X1 = x1^al1; X4 = x4^al4; X5 = x5^al5***

***fitfinal<-lm(y~X1+x2+x3+X4+X5)***

***par(mfrow=c(1,2))***

***plot(fittrial$residuals)***

***abline(0,0)***

***plot(fitfinal$residuals)***

***abline(0,0)***

***qqnorm(fittrial$residuals)***

***qqline(fittrial$residuals)***

***qqnorm(fitfinal$residuals)***

***qqline(fitfinal$residuals)***