**Tasks for Week-1: Regression**

Understand the following operations/functions on ‘mtcars’ dataset and perform similar operations on ‘CreditWorthiness.csv’ dataset based on given instructions.

rm(list=ls()) #To clear the environment

data <- mtcars #mtcars is a default dataset

library(dplyr) #dplyr is a library, which has functions related to

data analysis

data <- sample\_n(data,15)

# install.packages("ggplot2")

library("ggplot2")

ggplot(data,aes(x=wt,y=mpg))+geom\_point() #To plot - wt/gear

cor.test(data$wt,data$mpg) # to find the correlation value

# simple linear regression

slr = lm(mpg~wt, data)

summary(slr)

plot(slr$resid) # Residual plot

qqnorm(slr$resid) #Q-Q Plot

# Multiple linear regression

mlr = lm(mpg~wt+gear, data)

summary(mlr)

plot(mlr$resid) # Residual plot

qqnorm(mlr$resid) #Q-Q Plot