**R-Studio**

To get scatter plot:

Save all .txt or .csv files from GitHub

Run Capacity read.table (or import data, through environment window)

Install “scatterplot3d” if not already installed.

then run the scatterplot3d (make sure the code has the correct name for what data file has been saved as for capacities)

capacities.txt<- read.table("Capacities.txt", header = TRUE)

install.packages("scatterplot3d")

require("scatterplot3d")

scatterplot3d(capacities.txt)

s3d<- scatterplot3d(capacities.txt, pch=10, highlight.3d=TRUE, type="h", main="Capacities")

To run regression:

Have to specify column with c(1,2,3,4…..) to run regression. Can be copied directly from excel file. But will need to be formatted correctly (commas added between each number) Run first with information.

Then run regression

Capacity <- c(1900,1900,1890,1870,1865,1910,1900,1890,1880,1870,1900,1870,1860,1860,1850,1900,1840, 1830, 1810,1800,1910,1780,1770,1750,1710)

Grade <- rep(seq(0,8, 2), each=5)

HeavyVehicle <- rep(seq(0, 20, 5), 5)

Regression<- lm(Capacity ~ Grade + HeavyVehicle)

summary(Regression)