

# Assignment 12.1

**1. Use the given link below:**

**<https://archive.ics.uci.edu/ml/machine-learning-databases/communities/>**

**Perform the below operations:**

R file corrlplot.R attached

Splited the file to 5

communities\_file\_a.data,communities\_file\_b.data,communities\_file\_c.data,communities\_file\_d.data,communities\_file\_e.data all these files are attached along with corrlplots.

plot\_zoom\_file1.png,plot\_zoom\_file2.png,plot\_zoom\_file3.png,plot\_zoom\_file4.png,plot\_zoom\_file5.png

**a. Find out top 5 attributes having highest correlation (select only Numeric features).**

Police Per Population : Police Budget Per Population

Police Operational Budget : LemasTotalReq

OfficeAssignDrugUnit : PoliceOperBudg

PctPersOwnOccp : PctHousOwnOcc

PctPopUnderPov : PctUnemployes

**b. Find out top 3 reasons for having more crime in a city.**

Education - PctLess9thGrade

Marital Status - MalePctNevMarr

Percent of Black Police : PctPolicBlack e.t.c are some of the main reasons for crime in city

**c. Which all attributes have high correlation with crime rate?**

The corrlplot diagrams shows PctPolicBlack ,MalePctNevMarr, PctLess9thGrade e.t.c have highest corelation with crime rate