**USA Crime Analysis**

**1.Write a mapreduce/pig program to calculate the number of cases investigated under each FBI code**

Queries:

A = load '/user/acadgild/project1/crime/Crimes.txt' using PigStorage(',') as (ID:int,Case\_Number :chararray,Date:chararray,Block:chararray,IUCR:int,Primary\_Type:chararray,Description:chararray,Location\_Description:chararray,Arrest:chararray,Domestic:chararray,Beat:int,District:int,Ward:int,Community\_Area:int,FBICode:chararray,X\_Coordinate:int,Y\_Coordinate:int,Year:int,Updated\_On:chararray,Latitude:int,Longitude:int,Location:chararray) ;

gro = group A by FBICode;

co = foreach gro generate group, COUNT(A.FBICode);

**2.Write a mapreduce/pig program to calculate the number of cases investigated under FBI code 32.**

fil = filter co by $0=='32'

**3.Write a mapreduce/pig program to calculate the number of arrests in theft district wise.**

fil = filter A by Arrest == 'true';

dis = group fil by District;

co = foreach dis generate fil.District, COUNT(fil.District);

**4.Write a mapreduce/pig program to calculate the number of arrests done between october 2014 and october 2015.**

fil = filter A by Arrest == 'true';

da = FOREACH fil GENERATE ToDate(Date,'dd/MM/yyyy hh:mm:ss aa') as dt:datetime

C = filter da by dt > ToDate('2014-10-01T00:00:00.000+05:30') and dt<ToDate('2015-10-01T00:00:00.000+05:30');

D = group C all;

E = foreach D generate COUNT(C.dt);