**proc** **import** datafile = "\\tsclient\rosehuang\Downloads\group project data.csv"

out= p1data dbms=csv replace;

getnames= yes;

**run**;

**data** p1data;

set p1data;

police = po1-po2;

ur = u2/u1;

sop = so\*prob;

sowealth = so\*wealth;

sour = so\*ur;

sopop = so\*pop;

sopolice = so\*police;

soed = so\*ed;

wealthed = wealth\*ed;

probed = prob \*ed;

probwealth = prob\*wealth;

**run**;

**proc** **contents** data=p1data;

**run**;

**proc** **print** data=p1data;**run**;

/\*Univariate analysis\*/

**proc** **univariate** data=p1data;

var m so ed po1 po2 lf mpf pop nw u1 u2 wealth ineq prob time crime;

histogram;

**run**;

/\*For table 1\*/

**proc** **freq** data=p1data;

table so;

**run**;

**proc** **means** data=p1data;

var m so ed po1 po2 lf mpf pop nw u1 u2 wealth ineq prob time crime;

**run**;

/\*Bivariate analysis\*/

**proc** **reg** data=p1data;

model crime = m;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = so;

**run**;

**quit**;

**proc** **glm** data=p1data;

class so;

model crime = so;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = ed;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = po1;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = po2;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = lf;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = mpf;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = pop;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = nw;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = u1;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = u2;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = wealth;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = ineq;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = prob;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = time;

**run**;

**quit**;

/\*Create new variable for difference in police protection from 1960 to 1959\*/

**data** p1data;

set p1data;

police = po1-po2;

uemprt = u2/u1;

**run**;

**proc** **reg** data=p1data;

model crime = police;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = uemprt;

**run**;

**quit**;

**proc** **univariate** data=p1data;

var ed wealth uemprt police;

histogram;

**run**;

**proc** **reg** data=p1data;

model crime = prob wealth ur pop police ed;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = prob so sop;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = prob wealth so sowealth;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = prob ur so sour;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = prob pop so sopop;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = prob police so sopolice;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = prob ed so soed;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = prob time;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = prob wealth ed wealthed;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = prob ed probed;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = prob wealth probwealth;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = prob ur pop police ed;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = prob ur police ed;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = prob ur police;

**run**;

**quit**;

**proc** **reg** data=p1data;

model crime = prob police ed;

**run**;

**quit**;

**proc** **corr** data=p1data;

var ed wealth;

**run**;

**proc** **corr** data=p1data;

var ur wealth;

**run**;

**proc** **corr** data=p1data;

var m mpf;

**run**;