

```
libname SASDATA '/home/u63657920/DSAN_685/Data';

.....
proc import datafile='/home/u63657920/DSAN_685/Data/Cars.csv'
    out=SASDATA.cars_df
    dbms= csv replace;
    getnames=yes;
    datarow=2;

run;

.....
data SASDATA.cars_df2;
    set SASDATA.cars_df;
MSRP_1000 = input(MSRP,dollar12.3);
Invoice_1000 = input(Invoice,dollar12.3);
run;

.....
proc contents data=SASDATA.cars_df2;
run;

.....
proc print data=SASDATA.cars_df2;
run;

.....
proc sgscatter data= SASDATA.cars_df2;
    title "Scatterplot Matix for Cars Data";
    matrix MSRP_1000 Invoice_1000 Horsepower MPG_City MPG_Highway/group = Make
    diagonal= (histogram kernel)
    ellipse=(type=mean);

run;
title;

.....
proc princomp data=sasdata.cars_df2;
    var MSRP_1000 Invoice_1000 Horsepower MPG_City MPG_Highway;

run;

/*Create the diagnostics graph for the fit of Gas Mileage
explained by Enginesize, Wheelbase, and Horsepower*/
.....
proc reg data=sasdata.cars_df2;
    model MPG_City = EngineSize Wheelbase Horsepower;
    title 'Multivariate Regression Model';

run;

.....
/*Create the 95% confidence band and 95% prediction band for the fit of Gas Mileage
explained by the Enginesize*/
.....
proc reg data=sasdata.cars_df2;
    model MPG_City = EngineSize/alpha=0.05;
    output out=sasdata.pred
    predicted=p;

run;
```

