/\*Calling the library\*/

libname AEData "~/my\_shared\_file\_links/u47408605/Data"

access=readonly;

run;

/\*Merged data\*/

data Merged\_data;

merge AEData.db1 AEData.db2 AEData.db3;

by id;

run;

/\*Will statefips go in class reference line?\*/

/\*Model 1\*/

ods output ParameterEstimates=PEforModel1 DataSummary=ObsModel1 FitStatistics=AdjRsqModel1 Effects=OverallSigModel1;

Proc SurveyReg data=Merged\_data plots=none;

Class raceethnic ed occ ind statefips / Ref=first;

Model1: Model income=male raceethnic ed wkswork occ ind statefips male\*raceethnic male\*ed /Solution Adjrsq;

run;

/\*Model 2\*/

ods output ParameterEstimates=PEforModel2 DataSummary=ObsModel2 FitStatistics=AdjRsqModel2 Effects=OverallSigModel2;

Proc SurveyReg data=Merged\_data plots=none;

Class raceethnic ed occ ind statefips / Ref=first;

Model2: Model income=wkswork male raceethnic ed male\*raceethnic male\*ed raceethnic\*ed treatment/Solution Adjrsq;

run;

/\*Model 3\*/

ods output ParameterEstimates=PEforModel3 DataSummary=ObsModel3 FitStatistics=AdjRsqModel3 Effects=OverallSigModel3;

Proc SurveyReg data=Merged\_data plots=none;

Class raceethnic ed occ ind statefips / Ref=first;

Model3: Model income=wkswork male raceethnic ed male\*raceethnic male\*ed raceethnic\*ed treatment ability/Solution Adjrsq;

run;

/\* Step 1: clean-up the output of the regression analysis you have saved \*/

Data Table\_Long\_Project;

length Model $10; /\* Makes sure the variable Model has the right length and its values are not truncated \*/

length Parameter $30; /\* Makes sure the variable Parameter has the right length and its values are not truncated \*/

set PEforModel1 PEforModel2 PEforModel3 indsname=M; /\*"indsname" creates an indicator variable (here I call it "M") that tracks the name of databases use in the "set" statement \*/

keep Model Parameter EditedResults;

if M="WORK.PEFORMODEL1" then Model="Model1";

else if M="WORK.PEFORMODEL2" then Model="Model2";

else if M="WORK.PEFORMODEL3" then Model="Model3";

Where Estimate ne 0;

if Probt le 0.01 then Star="\*\*\*";

else if Probt le 0.05 then Star="\*\*";

else if Probt le 0.1 then Star="\*";

Results=Estimate;

EditedResults=Cats(put(Results,comma16.2),Star);

output;

Results=stderr;

EditedResults=Cats("(",put(Results,comma16.2),")");

output;

run;

proc sort data=Table\_Long\_Project out=Table\_Long\_Sorted;

by Model Parameter;

run;

data Model1Results(rename=(EditedREsults=Model1))

Model2Results(rename=(EditedREsults=Model2))

Model3Results(rename=(EditedResults=Model3));

set Table\_Long\_Sorted;

if Model="Model1" then output Model1Results;

else if Model="Model2" then output Model2Results;

else if Model="Model3" then output Model3Results;

drop Model;

run;

data Table\_Wide;

merge Model1Results Model2Results Model3Results ;

by Parameter;

if mod(\_n\_,2)=1 then Regressors=Parameter;

length Order 3;

if Parameter="Intercept" then Order=1;

else if substr(Parameter,1,10)= "treatment " then Order =2;

else if substr(Parameter,1,8)= "ability " then Order =3;

else if Parameter="male" then Order=4;

else if substr(Parameter,1,11)="raceethnic " then Order=5;

else if substr(Parameter,1,3)="ed " then Order=6;

else if substr(Parameter,1,15)="male\*raceethnic" then Order=7;

else if substr(Parameter,1,7)="male\*ed" then Order=8;

else if substr(Parameter,1,13)="raceethnic\*ed" then Order=9;

else if substr(Parameter,1,4)="occ " then Order =10;

else if substr(Parameter,1,4)="ind " then Order = 11;

else if substr(Parameter,1,10)= "statefips " then Order =12;

else if Parameter="wkswork " then Order = 13;

else Order=100;

run;

proc sort data=Table\_Wide out=Table\_Wide\_Sorted(drop=Order Parameter);

by Order;

run;

data NumofObs(keep=Label1 Model1 Model2 Model3);

merge ObsModel1(rename=(nvalue1=NVMoel1)) ObsModel2(rename=(nvalue1=NVMoel2)) ObsModel3(rename=(nvalue1=NVMoel3));

by Label1;

where Label1="Number of Observations";

Model1=put(NVMoel1,comma16.0);

Model2=put(NVMoel2,comma16.0);

Model3=put(NVMoel3,comma16.0);

run;

Data AdjRsq;

merge AdjRsqModel1(rename=(cvalue1=Model1)) AdjRsqModel2(rename=(cvalue1=Model2)) AdjRsqModel3(rename=(cvalue1=Model3));

by Label1;

Where Label1="Adjusted R-Square";

drop nvalue1;

run;

data OSM1(rename=(EditedValue=Model1)) OSM2(rename=(EditedValue=Model2)) OSM3(rename=(EditedValue=Model3)) ;

set OverallSigModel1 OverallSigModel2 OverallSigModel3 indsname=M;

Where Effect="Model";

Label1="Overall Significance";

if ProbF le 0.01 then Star="\*\*\*";

else if ProbF le 0.05 then Star="\*\*";

else if ProbF le 0.1 then Star="\*";

EditedValue=Cats(Put(FValue,comma16.2),Star);

if M="WORK.OVERALLSIGMODEL1" then output OSM1;

else if M="WORK.OVERALLSIGMODEL2" then output OSM2;

else if M="WORK.OVERALLSIGMODEL3" then output OSM3;

keep Label1 EditedValue;

run;

Data OverallSig;

merge OSM1 OSM2 OSM3;

by Label1;

run;

/\* Combine all rows for other statistics \*/

Data OtherStat;

set NumofObs AdjRsq OverallSig;

rename Label1=Regressors;

Run;

/\* Step 5: Add other statistics to the results table \*/

Data Table\_Wide\_Sorted\_WithStat;

set Table\_Wide\_Sorted OtherStat;

run;

proc format;

value $VariableName(default=50) "age"="Age"

"wkswork"="Number of Weeks Worked LAst Year"

"Number of Observations"="Number of Obs"

"Adjusted R-Square"="Adjusted R-sq"

"male"="Male"

"raceethnic 2"="Black"

"raceethnic 3"="Asian"

"raceethnic 4"="Hispanic"

"raceethnic 5"="Other "

"ed 2"="High School Graduate"

"ed 3"="Some College"

"ed 4"="College Graduate"

"ed 5"="Graduate Degree "

"occ 2"="Management Related Occupations"

"occ 3"="Professional Specialty Occupations "

"occ 4"="Technicians "

"occ 5"="Sales "

"occ 6"="Administrative Support Occupations"

"occ 7"="Service Occupations "

"occ 8"="Farming, Forestry And Fishing"

"occ 9"="Supervisors Of Production Workers"

"occ 10"="Mechanics and repairers "

"occ 11"="Construction"

"occ 12"="Other production workers "

"occ 13"="Machine operators "

"occ 14"="Motor vehicle operators "

"occ 15"="Other transportation"

"occ 16"="Military"

"ind 2"="Mining"

"ind 3"="Construction"

"ind 4"="Nondurable goods manufacturing"

"ind 5"="Durable goods manufacturing "

"ind 6"="Transportation, Communications and Utilities "

"ind 7"="Wholesale trade"

"ind 8"="Retail trade"

"ind 9"="Finance, insurance and real estate"

"ind 10"="Business and repair services"

"ind 11"="Personal services "

"ind 12"="Entertainment and recreation services "

"ind 13"="Professional and related services"

"ind 14"="Public administration 15=Military"

"male\*raceethnic 2"="Male\*Black"

"male\*raceethnic 3"="Male\*Asian"

"male\*raceethnic 4"="Male\*Hispanic"

"male\*raceethnic 5"="Male\*Other "

"male\*ed 2"="Male\*High School Graduate"

"male\*ed 3"="Male\*Some College"

"male\*ed 4"="Male\*College Graduate"

"male\*ed 5"="Male\*Graduate Degree "

"statefips 2"="Alaska"

"statefips 4"="Arizona"

"statefips 5"="Arkansas"

"statefips 6"="California"

"statefips 8"="Colorado"

"statefips 9"="Connecticut"

"statefips 10"="Delaware"

"statefips 11"="District of Columbia"

"statefips 12"="Florida"

"statefips 13"="Georgia"

"statefips 15"="Hawaii"

"statefips 16"="Idaho"

"statefips 17"="Illinois"

"statefips 18"="Indiana"

"statefips 19"="Iowa"

"statefips 20"="Kansas"

"statefips 21"="Kentucky"

"statefips 22"="Louisiana"

"statefips 23"="Maine"

"statefips 24"="Maryland"

"statefips 25"="Massachusetts"

"statefips 26"="Michigan"

"statefips 27"="Minnesota"

"statefips 28"="Mississippi"

"statefips 29"="Missouri"

"statefips 30"="Montana"

"statefips 31"="Nebraska"

"statefips 32"="Nevada"

"statefips 33"="New Hampshire"

"statefips 34"="New Jersey"

"statefips 35"="New Mexico"

"statefips 36"="New York"

"statefips 37"="North Carolina"

"statefips 38"="North Dakota"

"statefips 39"="Ohio"

"statefips 40"="Oklahoma"

"statefips 41"="Oregon"

"statefips 42"="Pennsylvania"

"statefips 44"="Rhode Island"

"statefips 45"="South Carolina"

"statefips 46"="South Dakota"

"statefips 47"="Tennessee"

"statefips 48"="Texas"

"statefips 49"="Utah"

"statefips 50"="Vermont"

"statefips 51"="Virginia"

"statefips 53"="Washington"

"statefips 54"="West Virginia"

"statefips 55"="Wisconsin"

"statefips 56"="Wyoming"

"statefips 60"="American Samoa"

"statefips 66"="Guam"

"statefips 69"="Northern Mariana Islands"

"statefips 72"="Puerto Rico"

"statefips 74"="U.S. Minor Outlying Islands"

"statefips 78"="U.S. Virgin Islands";

Run;

ods excel file="/home/u60659161/MySAS/Project1\_Part1.xlsx" options(Embedded\_Titles="ON" Embedded\_Footnotes="ON"); /\*Use the path to your MySAS folder \*/

Title "Table 3: Project1\_Part1";

footnote justify=left "Note: robust standard errors are in parentheses. \*, \*\*, and \*\*\* indicate

10%, 5%, and 1% significance levels, respectively.";

proc print data=Table\_Wide\_Sorted\_withstat noobs;

var Regressors;

var Model1-Model3 /style(header)={just=center} style(data)={just=center tagattr="type:String"};

format Regressors $VariableName.;

run;

ods excel close;