**/\* AGYEMANG ERIC\*/**

**/\*MAT 450 HOMEWORK 5\*/**

**/\*Generated SAS Code (IMPORT) \*/**

/\* Source File: vius.csv \*/

/\* Code generated on: 2/28/20, 2:10 AM \*/

%web\_drop\_table(WORK.IMPORT);

FILENAME REFFILE '/home/u45193287/vius.csv';

PROC IMPORT

DATAFILE=REFFILE

DBMS=CSV OUT=WORK.IMPORT;

GETNAMES=YES;

RUN;

PROC CONTENTS DATA=WORK.IMPORT;

RUN;

%web\_open\_table(WORK.IMPORT);

**/\*QUESTION 42 B)\*/**

proc surveymeans data = WORK.IMPORT mean clm ;

weight tabtrucks;

strata stratum;

var mpg;

domain transmssn;

run;

**SAS OUTPUT TO 42 B)** Estimated the average miles per gallon (MPG) for each of the transmission types (*transmssn*):

**The SURVEYMEANS Procedure**

|  |  |  |  |
| --- | --- | --- | --- |
| Statistics for TRANSMSSN Domains | | | |
| TRANSMSSN | **Variable** | **Mean** |
| Automatic | **MPG** | 16.665300 |
| Manual | **MPG** | 16.022122 |
| Semi-Automat | **MPG** | 14.846222 |
| Automated Ma | **MPG** | 16.732086 |

95% CI. For estimate the average miles per gallon (MPG) for each of the transmission type  
(*transmssn*).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Statistics for TRANSMSSN Domains | | | | | |
| TRANSMSSN | **Variable** | **Std Error of Mean** | **95% CL for Mean** | |
| Automatic | **MPG** | 0.043656 | 16.5797331 | 16.7508660 |
| Manual | **MPG** | 0.097739 | 15.8305537 | 16.2136903 |
| Semi-Automat | **MPG** | 1.012044 | 12.8626199 | 16.8298233 |
| Automated Ma | **MPG** | 1.599588 | 13.5969016 | 19.8672711 |

**(c)**  
proc surveymeans data = WORK.IMPORT mean clm;  
weight tabtrucks;  
strata stratum;  
var mpg;  
domain transmssn;  
run;

**The estimated ratio is 0.124410 with 95% CI [0.12258, 0.12624].**