

STAT:5400, Computing in Statistics
Fall 2016, Homework 7

Due: Mon. 11/07

Go to

http://www.amstat.org/publications/jse/jse_data_archive.htm
to download the data file "04cars.dat" and read "04cars.txt," which describes the dataset and variables.

Use SAS to do the following. Copy all your SAS code, and the requested output into a Word document or a text file for submission.

1. Write a data step to read this data into SAS. In the data step, create a new variable called "type" with codes indicating whether each car is a minivan, pickup, SUV, sportscar, wagon, or other.
2. Display the first 20 records in the dataset.
3. Create the following output:

The FREQ Procedure

type	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Minivan	20	4.67	20	4.67
Other	245	57.24	265	61.92
Pickup	24	5.61	289	67.52
SUV	60	14.02	349	81.54
Sportscar	49	11.45	398	92.99
Wagon	30	7.01	428	100.00

4. Create the following output:

type	City Miles per Gallon			Highway Miles per Galon			Weight in pounds		
	N	Mean	Std	N	Mean	Std	N	Mean	Std
Minivan	20	17.9	1.4	20	24.5	2.5	20	4193.6	283.6
Other	236	21.8	5.7	236	29.4	5.4	243	3319.7	554.9
Pickup	23	16.7	3.2	23	21.2	3.8	24	4250.8	886.8
SUV	59	16.2	2.7	59	20.6	3.2	60	4444.4	889.3
Sportscar	47	18.6	2.5	47	25.7	2.7	49	3295.7	478.1
Wagon	29	21.0	4.2	29	27.8	4.5	30	3438.8	581.5
All	414	20.1	5.2	414	26.9	5.7	426	3577.2	760.4