Class Assignment: MPG tables and charts

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Class assignment:

Using the MPG dataset, which is available with the ggplot2 library, produce a document that includes the following elements: headers, text, tables, and plots.

Tables should include a comparison of city and highway mileage by the class of car and the best three car models for city and highway mileage for all the years in which data is available.

Plot the data displaying as much of the data as you can. Put continuous variables on the axes and include a locally smoothed regression line to show the relationship with mileage. Also make a box plot comparing city and highway MPG by class of car.

Tables

This example is flawed even though the code works. Explain. And now that you know how to produce the table can you improve the code by using an **apply** functional?

City MPG by Class of Car: 1999, 2008

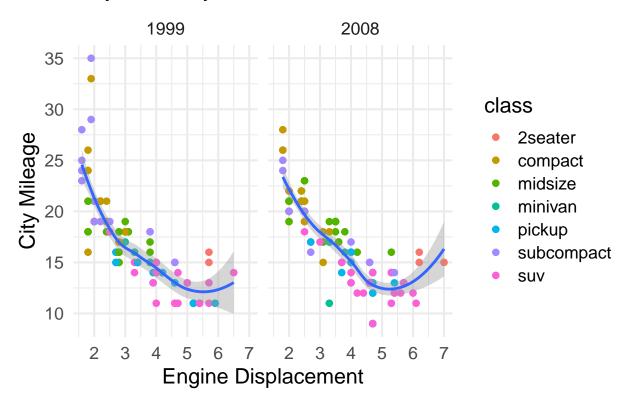


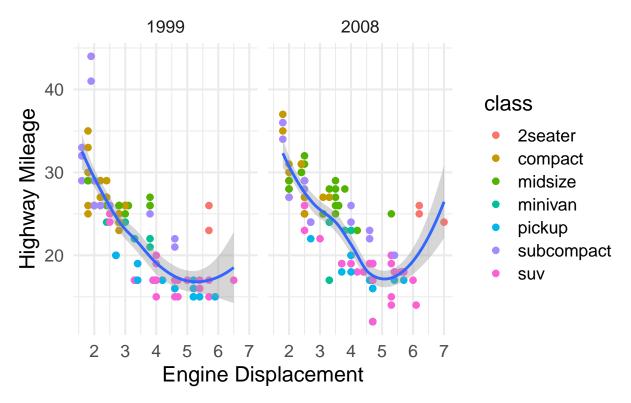
Table 1: Mean City and Highway MPG by Car Class

Class	City	Highway
compact	20.13	28.3
midsize	18.76	27.29
suv	13.5	18.13
2seater	15.4	24.8
minivan	15.82	22.36
pickup	13	16.88
subcompact	20.37	28.14

Table 2: Top 3 MPG Performing Cars: 1999, 2008

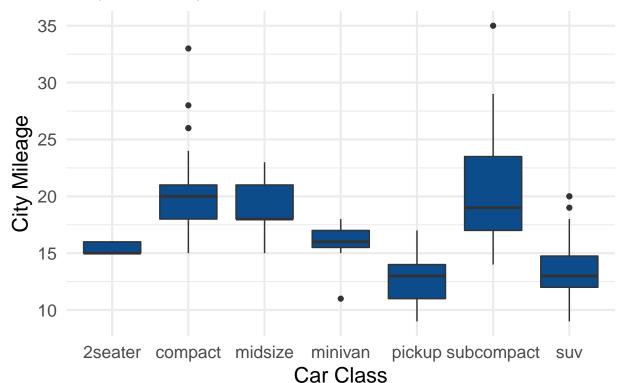
City 1999		Highway 1999		City 2008		Highway 2008	
Model	Milage	Model	Milage	Model	Milage	Model	Milage
new beetle civic corolla	26 24.8 24.67	new beetle corolla civic	35 32.67 31.6	corolla civic gti	27 24 21.5	corolla civic camry	36 33.75 30

Highway MPG by Class of Car: 1999, 2008



Boxplots

City MPG by Class of Car: 1999, 2008



Highway MPG by Class of Car: 1999, 2008

