Homework2.3

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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

Comparison of city and highway mileage by the class of car

Best three car models for city and highway mileage for all the years

City MPG by Class of Car: 1999, 2008

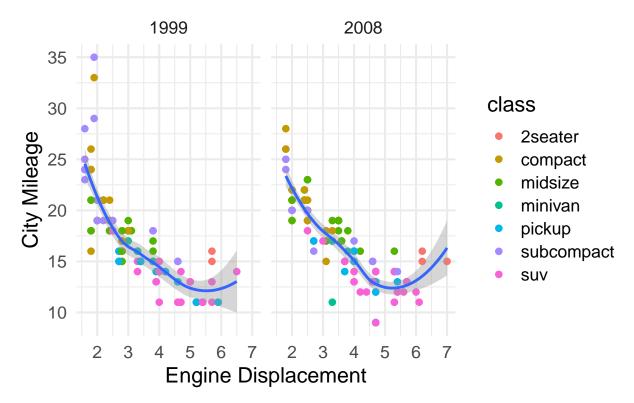


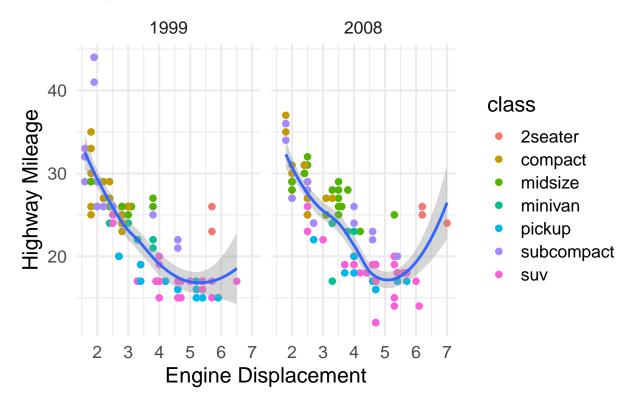
Table 1: Mean City and Highway MPG by Car Class

	City	Highway
2seater	15.40	24.80
compact	20.13	28.30
midsize	18.76	27.29
minivan	15.82	22.36
pickup	13.00	16.88
subcompact	20.37	28.14
suv	13.50	18.13

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

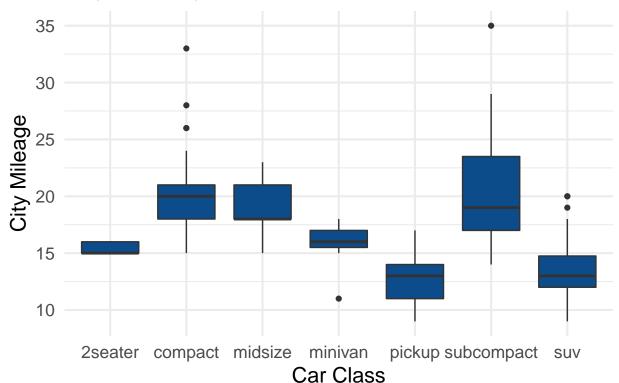
City 1999		Highway 1999		City 2008		Highway 2008	
	Milage		Milage		Milage		Milage
new beetle civic corolla	26 24.8 24.67	new beetle corolla civic	35 32.67 31.6	corolla civic gti	27 24 21.5	corolla civic camry	36 33.75 30

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

