Assignment 3 - Math 448

Assignment 3: Due 1/31 by email

There is a notebook file to get you started on Assignment 3 on Blackboard. The goal of this assignment is to further develop your skills in using functions and lists.

For this assignment, you will be using a data set on automobiles manufactured in 1993. Complete the following tasks, and comment your code as appropriate.

1. Create a function that takes in an integer and outputs a list of cars with that number of cylinders.
2. Create a list of all cars with 4 or more cylinders.
3. Create a function that uses City MPG, Highway MPG, and tank to generate an estimated range in miles for the vehicle.
4. Create a listed cars sorted by estimated range.
5. Create a function that calculates the average price per cylinder in a car.
6. Create a list of the 10 cars with the most expensive cylinders.
7. For each Type (Small, Sporty, Compact, Midsize, Large) of vehicle, what is the average horsepower?