

## *Statistics for Geography (GEOG 533) Lab 1*

`data(Cars93)` in the **MASS** package contains data from 93 cars on sale in the USA in 1993.

1. The **Type** variable classifies the type of market the car is aimed at. Find the cheapest (**Price**) car in each type, and the car with the greatest fuel efficiency (**MPG.highway**). Find out the **Manufacturer** and **Model**. (20 pt.)
2. Compute the mean **Horsepower** for each type, and the difference between each cars horsepower and the mean for its type. Based on the difference values, calculate the skewness and kurtosis (10 pt.)
3. Create two new data frames for USA and non-USA cars. (10 pt.)
4. Use **write.csv()** to save the USA car data to a file. Read it in and check to see that all the factors are correctly set as factors. (10 pt.)

### **What to submit:**

1. A Microsoft Word document that contains the results/screenshots for each question.
2. An R script for all questions.

File name convention for assignment submissions: lastname\_firstname\_lab1.zip