This week is all about practicing with functions and data.

(1a) Starting with the movie code from yesterday - write a function that takes a list of lists (of movies) as an argument, AND a string (the name of a movie). Return TRUE if that movie is in your collection, and FALSE if it isn't. Now, there's lots of BAD ways to do this. We will do it the right way. That means - USING the right kind of loop - the kind we ALWAYS use for searching for things, when we can stop when we find it. Look at each movie title, one at a time, and....well, you can figure out the rest.

(1b) Write a driver function. That function should CALL our function that returns the list of list of movies. Then ask the user for the name of a movie. Then pass our movies, and the name the user input to the function from (1a) above, getting a boolean in return. Use that boolean to print a nice message about whether or not we have that movie in our collection.

(2a) Take the code you wrote last week to find the average closing price of google stock. Turn it into the following functions, with appropriate names.

Function 1: Takes one argument, the name of a csvFile (as a string). Should ultimately be used to open the google csv file, and read in all the closing prices in to a list. Make sure it's a list of floats. Return that list. Think about how you might do this.

Function 2: A function that given a list of values as an argument, returns the average value for that list.

Function 3: A driver function that: calls your first function, to get a list of values. Calls your second function to get the average value. Print out the number of days of data you have, the average stock price, the start price (the first entry) and the end price (the most recent entry).

(2b) Test your code using the CSV of GOOG data from last week, AND with the CSV of BitCoin (BTC-USD.csv) data that I downloaded yesterday - you'll find it on Nexus. Include calls to your functions with BOTH files, and print the averages of both prices.

(3) There's one more CSV file on Nexus - earthquake date from the US Geological Survey for one month in 2016 (earthquakes.csv). Write function(s) to answer the following questions. How you structure it is up to you.

- What was the full location of the largest magnitude earthquake - and what was the magnitude?

- How many earthquakes of ANY magnitude occurred in California in the data?