CSCI S-38 Summer 2018
Problem Set 5

1. Modify the Money structure from problem set 3 as follows:
   a. make it a class , not a struct
   b. make the addMoney() and showMoney() functions be methods of the class
   c. create a constructor to initialize dollars and cents to 0.
   d. write a program to instance and test your Money class.

2. Create a string with a series of six numbers.   With the help of a stringstream, add all numbers in the string.

3. Note: Each problem in the next set of 3 will build on the last one. Create a separate program for each

   a. Create a plain text file with first and last names.
      Write a program to read each line from the file and display it.
      Count the number of lines as you read from the file, and display how many names there were.

   b. Read through the file one time to get a line count and create a dynamic array large enough to store all of the names.
      Read all names from the file in an array.
      Sort the names (by first name)
      Write the names to a new file.

   c. Change the file to include the name plus several integers after the name.
      When you read the numbers, compute their average for each person.
      Create a class that contain the first and last name and the computed average. Store all objects in a dynamic array that you allocate.
      Extra credit(required for grad students):
      Sort the objects by grade average.
      Display all names and averages from highest to lowest.