Assignment 5

01/12/2017

In this exercise, you can create your code in one main program without separation to three files[*optional*]. Each exercise should be written in an individual program that has the exercise name and number. In you online submission, all your programs should be in one folder.

Exercise 1:

- Problem 6.50.
- Problem 6.51
- Problem 6.52

Exercise 2

- Problem 6.61

Exercise3

- Problem 7.22

Exercise 4:

1. In the main method, create a 10 x 8 two dimensional array consisting of random integers in the range 50 to 99, including the end points
2. Call a method named printArray that will print the array, appropriately labeled, 8 numbers per line, with a space between each
3. Call a method named findSmallest that will find and print, appropriately labeled, the smallest number in the array
4. Call a method named findAverage that will find and print, appropriately labeled, the average of the numbers in the array
5. Call a method named findMode that will find and print, appropriately labeled, the number that occurs most often. It there are ties, print only 1
6. Call a method named removeEvens, that will modify the array such that all even numbers are replaced by the number 11
7. Call the method named printArray discussed in part 2 above and print the array as modified in part 6 above.
8. Call a method named identity that will place a 1 along the diagonal (upper left to bottom right) with a 0 in all other cells

Exercise5:
Write C++ program to implement four functions which takes a matrix as an argument and perform the following functions (you can use 4x4 matrix as input matrix that the user enters the elements):

1) Compute sum of left diagonal elements
2) Compute sum of right diagonal elements
3) Print the lower diagonal matrix
4) Print the upper diagonal matrix

Exercise 6: Problem 7.35.