

ITCS 201 – Fundamentals of Programming

Week 7: Lab Assignments

Name: _____ ID: _____

Due: today or in a lab session next week

Instructions:

- Marking lab assignments will be done in the lab
- **Compile** and **Run** your program
- **Show** and **Explain** the output to the lecturer or the lab assistance.

----- **Lab Assignments** -----

In this assignment, you need to write C programs for the following problems.

Lab 1: Declare an array of size 5, Let a user enter 5 positive numbers to the array.

Then, sum the number at position 1,3,5 together and display the output as below

Example output:
4 8 7 15 3 SUM = 14

Lab 2: Declare an array of size 10. Let a user enter as many values (positive integers) as possible into the array until enter a negative value to signal the end of the input or exceed the maximum value. Then, find the average of the values and show the output as below. For example:

Example output:
7 6 5 4 3 2 -1 AVG = $(7+6+5+4+3+2)/6 = 4.5$

Lab 3: Declare an array of size 5, Let a user enter 5 positive numbers to the array. Then, swap the number at position (1 and 5) and (2 and 3). Then display the output as below

For example:

Example output:
7 6 5 4 3
3 5 6 4 7

Bonus Questions

Bonus Lab: Declare two arrays of size 5 named A and B respectively. Assign the following value to the array A: 5 4 3 2 1. Next, write a program to copy the elements one array into another array and display it in reverse order as below

Example output:
1 2 3 4 5