

**Course Code:** CSE 331L/EEE 332L/EEE453L/ETE332L

**Section:** 3

**Course Title:** Microprocessor Interfacing & Embedded System Lab

**Lab Instructor:** Shakiful Alam Oyon



## **Home Work 2**

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**\*\*Submit (.asm) files of the solves.**

### **Problem 1**

Write a program that searches for a character inside a string. Both the string and the search character should be taken from the user. Once the character is found, your program should output the location of the character, that is, the index of the character where it resides. If there are multiple instances of the same character, then take only the first one into consideration.

### **Problem 2**

You are given two arrays loaded with random numbers. You must add the content of each array and the sum will be stored in another array. You must print the contents of the sum array. Ex:

<b>Array 1</b>	1	2	3	4	5
<b>Array 2</b>	5	4	3	2	1
<b>Sum Array</b>	6	6	6	6	6

### **Problem 3**

Create the three arrays. Load values of your wish in the first two. Place the sum of each of the element in the two arrays into the third array. You are given an array of 10 elements. Create two arrays 'even' and 'odd'. Write a code to put the even-indexed values in 'even' array and odd-indexed values in 'odd' array.

[Use LEA, INC, DEC]

For example:

Given Array

<b>Index</b>	0	1	2	3	4	5	6	7	8	9
<b>Values</b>	6	3	1	4	0	8	9	2	7	5

Even indexes are marked in green and odd indexes are marked in blue:-

Even

<b>Index</b>	0	1	2	3	4
<b>Values</b>	6	1	0	9	7

Odd

<b>Index</b>	0	1	2	3	4
<b>Values</b>	3	4	8	2	5