Course Instructor: Md. Asif Khan Rifat Lab: 05

Course: CSE103 (Structured Programming)

## **Topics Today**

1. 1D Array

### **Problem 1**

Write a program in C to read n number of characters in an array and display them in reverse order.

Sample Input	Sample Output					
Enter Array Size: 5						
program	margorp					

### **Problem 2**

Write a C program to read n number of values in an array and print their average value.

Sa	mp	ole	Inpu	Sample Output				
3	3 6 2 12 4 35 9						3	Average is 9.25

#### **Problem 3**

Write a C program to count total number of even and odd elements in an array.

Sample Input									Sample Output			
1	1 13 90 3 6 2 12		13 90 3 6 2 12 4 35 9 3 99						Even numbers: 5			
												Odd numbers: 7

#### **Problem 4**

Write a C program to merge two arrays to third array.

Sample Input	Sample Output					
1 <sup>st</sup> Array: 1 13 90 3 6	Merged Array:					
2 <sup>nd</sup> Array: 2 12 4 35 9 3 99	1 13 90 3 6 2 12 4 35 9 3 99					

## **Problem 5**

Write a C program to search for an element and print its index if found in an array.

Sample Input	Sample Output
3 6 2 12 4 35 9 3	
Target: 12	Target 12 is found at index 3
Target: 67	Target 67 is not found

# **Problem 6**

Find the largest difference between any two elements in an array.

Sample Input									Sample Output				
	3	6	2	12	4	35	9	3	The	largest	difference	is	33