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## **FUNDAMENTALS OF PROGRAMMING**

### **LAB 10 – Arrays**

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#### **READ IT FIRST**

Prior to start solving the problems in this assignments, please give full concentration on following points.

1. WORKING – This is individual lab. If you are stuck in a problem contact your teacher, but, in mean time start doing next question (don't waste time).
2. DEADLINE – mentioned on elearning.
3. SUBMISSION – This assignment needs to be submitted in a soft copy.
4. WHERE TO SUBMIT – Please visit your elearning course.
5. HOW TO SUBMIT – submit .docx file as discussed in class.

#### **KEEP IT WITH YOU!**

1. Indent your code inside the main () function. It's a good practice!
2. It is not bad if you keep your code indented inside the loops, if and else blocks as well.
3. Comment your code, where it is necessary.
4. Read the entire question. Don't jump to the formula directly.

## Exercises

### Task01 (Creating and Printing)

Write a program to declare an array of N integers where N is user input and perform following operations:

- a) Initialize an array to (55, 63, 78, 98, 10, 24, 32, 55, 20, 47) and print array without loop.
- b) Take user input N times, store in array and print (use loop).
- c) Access only 5<sup>th</sup> value from array
- d) Change value of 3<sup>rd</sup> value to 20.
- e) Print ODD VALUES stored in array.
- f) Print values which are on ODD INDICES ONLY.
- g) Take input from user and find whether it is present in array or not. Design function as bool searchVal(int input), that will return true/false.
- h) Design a function as int greaterThanValue(int input), that will return number of values greater than input.
- i) Design a function as int lessThanValue(int input), that will return number of values greater than input.

**Tas02 (Merging Two Arrays)**

Create two arrays arr1, arr2 of N, M integers respectively and store any values. Create third array arr3 of N + M integers which should be empty initially. Design a function **void MergeArrays (int[] arr1, int[] arr2, int[] arr3)** that will merge both arr1, arr2 and store in arr3.

**Input:**

8	10	20	4	22
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23	999	87	51	74
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**Output:**

8	10	20	4	22	23	999	87	51	74
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