Flowgorithm Session-4

1. Create an array of 10 elements and read the element and print the elements. Printing should be for example a [0] =1, a [1] =2, a [2] =3 … etc.

2. Create an array of 5 elements and find the following
    a. Largest element
    b. Smallest element

3. Create an array of 10 elements and find the following
    a. Sum of the array elements
    b. Product of the array elements

4. Create an array of 8 elements and input a key value to search if the key is present in the array or not. Use linear search.

5. Create a sorted array of 5 elements and input a key value to search in the array using binary search.

6. Create an array of characters of size 5. Find the number of occurrences of an input character variable say ch.

7. Create an array of 10 elements and do the following using module [Use each one of these as a choice from the user]
    a. Count the number of even numbers in the array
    b. Count the number of odd numbers in the array
    c. Find the sum of elements in the even indices
    d. Find the sum of elements in the odd indices
    e. Find the largest even number in the array
    f. Find the smallest odd number in the array

8. In a class heights of the students are recorded. The total strength of the class is 50. Sort the heights of students in descending order using selection sort. [Hint implements assuming the strength as 10].

9. The top 5 student's marks in CTPS are recorded randomly. Sort the marks in ascending order using bubble sort. Find the average among them.

10. Input price of 5 items into an array and using a user choice sort the price array in descending order :--
    Choice1: Use Insertion Sort
    Choice2: Use Merge Sort