

**INDIAN SCHOOL MUSCAT**  
**COMPUTER SCIENCE**  
**CLASS 11 (2017-18)**

**REVISION ASSIGNMENT 4**

**DATE : 28.01.2018**

**TOPIC : Programming QUESTIONS ( Structures and User defined Functions )**

- 1 Write a function called zero\_small() that has two integer arguments being passed by reference and sets the smaller of the two numbers to 0. Write the main program to access the function.
- 2 Write a function that receives two numbers as an argument and display all odd numbers between these two numbers. Call this function from main( ).
- 3 Write a function SECOND\_HIGHEST() having one dimensional float array as an argument and returns the second highest value. Write main function to call this function and supply the required argument.
- 4 P is one-dimensional array of integers. Write a C++ function to efficiently search for a data VAL from P. If VAL is present in the array then the function should return value 1 and 0 otherwise. Write main function to call this function.
- 5 Given two arrays of integers A and B of sizes M and N respectively. Write a function named MIX () with four arguments (A,B,C,M,N) which will produce a third array named C. such that the following sequence is followed.  
All even numbers of A from left to right are copied into C from left to right.  
All odd numbers of A from left to right are copied into C from right to left.  
All even numbers of B from left to right are copied into C from left to right.  
All old numbers of B from left to right are copied into C from right to left.  
A, B and C are passed as arguments to MIX ().  
e.g., A is {3, 2, 1, 7, 6, 3} and B is {9, 3, 5, 6, 2, 8, 10}  
the resultant array C is {2, 6, 6, 2, 8, 10, 5, 3, 9, 3, 7, 1, 3}
- 6 Write a function (having a string as an argument to) to count number of vowels in the string. Function should return number of vowels. Write main function to call this function and display the result.
- 7 Write a program to do the following:
  - Define a structure POINT with TWO integer elements: X AND Y
  - Declare a variable P1 of type POINT and simultaneously initialise it with 0,0
  - Declare another variable P2 of type POINT and copy the values of P1 in P2
  - Display the values in P1 and P2
  - Obtain new values of P1 and P2 from the user
  - Display the values in P1 and P2
  - Calculate the distance between P1 and P2 and store the result in D and display D.
- 8 An array stores details of 25 students (rollno, name, and marks in three subjects). Write a program to create such an array and print out a list of students who have failed in more than two subjects.