**SET – C**

**Name: Mobile Number: Email ID:**

**Qualification: Programming Lang: Date:**

**Section 1**

1. Write a program which takes an integer number and find sum of all digits and repeat until the sum gets a single digit in the end.

Example 1:

**Input**: 5643

**Hint**: 5+6+4+3=18; again 1+8=9

**Output**: 9

1. Write a program to count the number of 2s between 0 and n.

Example:

* **Input**:  N=35
* **Output**: 14

List of 2s between [0,35]: 2, 12, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 32,   
**Note**: If number 22, it will be counted as twice.

1. Write a program to find the max product of three numbers from given integer array.

**Input**: arr[] = {6, 3, 2, 0, 10}

**Output**: 180 // The subarray is {6, 3, 10}

**Section 2**

1. Write a program to print frequency of each character in a given string.

**Input:** Enter a string: aaaBBcd

**Output**: a-3,B-2,c-1,d-1

1. Write a program to print prime number from 1 to n. (Where n is enter by user.)

**Output**:

Enter n value: 100

Prime numbers: 2, 3, 5, 7, 11, 13,…

1. Write a program to find the 2nd highest value from array.

**Input:** [5, 8, 6, 11, 4, 6, 9]

**Output:** 9

1. Write a program to remove duplicate characters from a string.

**Input:** HelloWorld

**Output:** Helowrd

1. Write a program to swap neighbour char in string

**Input:** abcde

**Output:** badce