

## **Tutorial and Assignment Sheet – ODD 2022**

### **15B11CI311 – Data Structures**

#### **Week 4 (29 Aug-04 Sep, 2022)**

Q.1. Write pseudo code to print first 50 natural numbers using recursion. Now remove this recursion and implement explicitly using stack.

Q.2. Write pseudo code to print Sum of Natural Numbers Using Recursion.

Q.3. Write pseudo code to find sum of all digits using recursion.

Q.4. Write pseudo code that takes a string and returns if the string is a palindrome.

Q.5. A list of students is given in ascending order of their height. Find all students with a height just above 5 feet.

Q.6. In a list of 400 students, find

- a. the student details having 4<sup>th</sup> largest marks in Data Structures T1 if not sorted
- b. the student details having 4<sup>th</sup> smallest marks in Data Structures T1 if not sorted
- c. find all the students names having marks greater than 15 if sorted in descending order of T1 marks