## ACADEMY OF TECHNOLOGY



## Lab Assignment (Day 2)

Paper name: Design and Analysis of Algorithms Lab Code: PCC-CS494 Semester:  $4^{th}$  Discipline: CSE Time: 2 Hours

Date: February 28, 2023

- 1. Write a program in C or C++ to find the sum of digits of a number using recursion.
- 2. Write a program in C or C++ to Check whether a given Number is Palindrome or not using recursion.
- 3. Write a program in C or C++ to find GCD of two numbers using recursion.
- 4. Write a program in C or C++ to find the largest element of an array using recursion.
- 5. Write a program in C or C++ to convert a decimal number to binary using recursion.
- 6. Write a program in C or C++ to check a number is a prime number or not using recursion.
- 7. Write a program in C or C++ for binary search using recursion.
- 8. Write a program in C or C++ to implement Tower of Hanoi.