Assignment 11

Due on 2021-04-07, 29:59 IST.

1. a) What is the expected time complexity of this program?

b) Write a program to reverse the given string.

c) Write a program to sort the given array using quicksort.

2. a) What is the expected time complexity of this program?

b) Write a program to search for a given element in a binary search tree.

c) Write a program to insert a new node into a binary search tree.

3. a) What is the expected time complexity of this program?

b) Write a program to calculate the factorial of a given number.

c) Write a program to find the greatest common divisor (GCD) of two numbers.

4. a) What is the expected time complexity of this program?

b) Write a program to find the minimum and maximum elements in an array.

c) Write a program to find the sum of all elements in an array.

5. a) What is the expected time complexity of this program?

b) Write a program to find the prime numbers in a given range.

c) Write a program to find the Fibonacci numbers in a given range.

6. a) What is the expected time complexity of this program?

b) Write a program to find the number of occurrences of a given character in a string.

c) Write a program to find the length of the longest common subsequence between two strings.