

CSC210 Advanced Algorithm and Design Lab
20/03/2023

Time: 1 Hour
Marks: 100

Instructions

1. Write the programs with proper comments and indentation
2. Create a directory <Admission Number>_<Date> [21JEXXXX_090122], copy all the files into it and **upload in Google Class Room**
3. Submit a single C/C++ source file
4. Do not use STL calls
5. Each program should start with these comment lines:

/*

Name:

ID No:

*/

Q1. Consider matrix chain multiplication problem. A sequence of n matrices are to be multiplied. Write a function `Matrix_Multiply` that takes the matrices and compute the optimal parenthesizing and number of operations required.

The **main()** function:

1. Takes number of matrices and input values. Call the function `Matrix_Multiply` [10]
2. *Compute_IG* computes the optimal parenthesizing and number of operations required [40]

Q2. Write a program `LCS` to find longest common subsequence between two lists through dynamic programming.

The **main()** function:

1. Takes two lists of elements. Call the function `LCS` [10]
2. *LCS* computes the sequence and the path for the sequence [40]