## INDIAN STATISTICAL INSTITUTE

B.Stat – 3 rd Year, 2018-2019 (Semester -I)

Design and Analysis of Algorithms

Assignment-5: Programming Assignment

## **Problem:**

Given a sequences of matrices, find the most efficient way to multiply these matrices together, i.e how to parenthesize the matrices so that it requires minimum number of multiplications. Implement it in C/C++. (Hint: Use Dynamic Programming) (15 marks)

## **Submission:**

You have to submit the assignments by e-mail to algo 2018bstat3 @gmail.com by 7.11.2018 The subject line of the e-mail should be Assignment 5. Your file name should be your roll number. As an example if your roll number is bs16xx then your file name should be bs16xx.c/cpp.

- Note 1:- Implementations need to be in C/C++.
- Note 2:- Input will be the number of matrices and the dimensions of the matrices.
- Note 3:- Please name your file as bs16xx.c/cpp (Don't put any capitals/spaces/underscore in the file name).
- Note 4:- Please clearly mention your output while executing your code.
- Note 5 : If copying is detected all the persons involved would be penalized. The degree of the penalty may even exceed the total marks allotted for assignments