## **Assignment-1**

## **Analysis and Design of Algorithms (CS311)**

Deadline: 27.03.2024 13:00

Write a C++ program to generate the first n numbers of the Fibonacci series using iterative and recursive approaches. Analyze both approaches and estimate time complexity in terms of asymptotic notations. Find out the execution time taken for both approaches for different values of n. Report this in a document and compare your analysis in asymptotic notation and execution time taken in both approaches. The comparison should include text, tables, and graphs.

## Note:

- 1. This is an individual assignment.
- 2. Name your zip file as ADA-A1-RegistrationNo-YourName.zip/rar. Include both your report and code in a zip file. Submit your zip file to the folder ADA-S24-A1 on fs.
- 3. Cheating will be penalized. Plagiarism in any form will not be tolerated.