

School of Engineering
Jawaharlal Nehru University

B. Tech. (2nd Semester)
Subject: Data Structure

Instructions:

1. You are advised to use Google Document to write your program.
2. Write your document name as (Branch_RollNumber_Lab_1) [Example: CS_01_Lab_1]
3. Each program should start with new page.
4. At least four Test Cases should be provided with each program.
5. Plagiarised content (program) will be penalised.
6. Submit the assignment on time (request for date extension will not be entertained)
7. Check the linked Sample Copy for further clarification.

https://docs.google.com/document/d/1TfnEi_MgEwByxG_9Ez_s51Ss_GYh_5G6FBA0KoFh_j8/edit?usp=sharing

Lab Assignment No. 3 (Array and Stack)

1. Write a C++ program to convert infix expression to postfix [use only basic set of operators i.e. +, -, *, /, (, and)].

Test Case:

Enter infix expression: a+b*c

Postfix expression: abc*+

2. Write a C++ program to evaluate postfix expression [use only digit and basic set of operators i.e. +, -, *, and /].

Test Case:

Enter postfix expression: 562-+

Result: 9

3. Write a C++ program to calculate factorial of user defined input using recursion.

Test Case:

Enter value: 5

Result: 120

4. Write a C++ to generate Fibonacci sequence till user defined input terms.

Test Case:

Enter value: 6

Result: 0, 1, 1, 2, 3, 5

5. Write a C++ program that accepts a four-digit number from the user at run time and print it in reverse form. (Ex. 6512 => 2156)

Test Case:

Enter Number: 6512

Result: 2156