# Rajalakshmi Engineering College

Name: SANTHOSH S

Email: 241801251@rajalakshmi.edu.in

Roll no: 241801251 Phone: 9790911586

Branch: REC

Department: I AI & DS FD

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Degree: B.E - AI & DS



### NeoColab\_REC\_CS23231\_DATA STRUCTURES

REC\_DS using C\_Week 3\_COD\_Question 4

Attempt : 1 Total Mark : 10 Marks Obtained : 0

Section 1: Coding

#### 1. Problem Statement

You are a software developer tasked with building a module for a scientific calculator application. The primary function of this module is to convert infix mathematical expressions, which are easier for users to read and write, into postfix notation (also known as Reverse Polish Notation). Postfix notation is more straightforward for the application to evaluate because it removes the need for parentheses and operator precedence rules.

The scientific calculator needs to handle various mathematical expressions with different operators and ensure the conversion is correct. Your task is to implement this infix-to-postfix conversion algorithm using a stack-based approach.

Example

Input:

a+b

Output:

ab+

**Explanation:** 

The postfix representation of (a+b) is ab+.

### **Input Format**

The input is a string, representing the infix expression.

## **Output Format**

The output displays the postfix representation of the given infix expression.

Refer to the sample output for formatting specifications.

Sample Test Case

Input: a+(b\*e)
Output: abe\*+

**Answer** 

Status: Skipped Marks: 0/10

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