



Graded Lab:	1	Subject:	Data structures and algorithms
Section:	D12	Total Marks	30
Submission Date:	03 April 2023		

Note:

- 1. Put all your relevant code files along with word file have all of your code in it in a .rar file.**
 - a. Write your Name and registration number in word file.**
 - b. Write your Name and registration number in code files and comment them.**
- 2. Submission is created, submit .rar file on portal.**

Q1. Write a program that converts a given infix expression to postfix notation using a stack. For example, given the infix expression "3 + 4 * 2 / (1 - 5) * 2 ", the program should output the postfix expression "3 4 2 * 1 5 - 2 * / +". (10)

Q2. Write a program that checks if a given expression containing parentheses is balanced. For example, "[()]{ }]" is balanced, but "[(){}]" is not. (10)

Q3. Write a program to reverse a string "Practice is what makes you better" in C++ using stack. (10)