

**Modern Education Society's Wadia  
College of Engineering, Pune**

<b>NAME OF STUDENT:</b>	<b>CLASS:</b>
<b>SEMESTER/YEAR:</b>	<b>ROLL NO:</b>
<b>DATE OF PERFORMANCE:</b>	<b>DATE OF SUBMISSION:</b>
<b>EXAMINED BY:</b>	<b>EXPERIMENT NO: DSL D-27</b>

**TITLE :PERFORM VARIOUS OPERATION ON STACK AND  
IMPLEMENT ITS APPLICATION.**

**PROBLEM STATEMENT :** Implement C++ program for expression conversion as infix to postfix and its evaluation using stack based on given conditions

- i. Operands and operator, both must be single character.
- ii. Input Postfix expression must be in a desired format.
- iii. Only '+', '-', '\*' and '/' operators are expected.

**OBJECTIVES :**

1. To understand structure of stack.
2. To understand How to Create, Display and perform various operation on stack.

**OUTCOME :**

1. To operate on the various structured data.
2. To analyze the problem to apply suitable algorithm and data structure.
3. To discriminate the usage of various structure in approaching problem solution.

**PRE-REQUISITES :**

1. Knowledge of C++ Programming
2. Knowledge of stack.

**APPARATUS :**

1. OS: Ubuntu 18.04.2 LTS
2. Processor: Intel® Core™ i7-4790S CPU
3. Graphics: GeForce GT 610/PCIe/SSE2
4. Storage: 400 GB
5. Text Editor: gedit
6. Compiler: GNU C++ Compiler (g++)
7. Terminal

**QUESTIONS :**

1. Evaluate the following postfix expression and show all steps:  $ab*c+d-e+$
2. Write an algorithm to prefix to postfix.