**Practical No: 10(D)**

**Practical Title:** Write a C++ program for expression conversion as **infix to postfix** and its evaluation using stack

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

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

**Pre-requisite:**

* Basics of stack.
* Different operations that can be performed on stack

**Objective:**

* To convert the expression from infix to postfix
* Evaluate the expression

.

**Input :** Infix expression

**Outcome:**

* Equivalent postfix expression
* Result of evaluation of an expression.

**Theory:**

* **Write short theory for stack.**
* Explain infix to postfix expression
* **Example infix to postfix conversion**

Algorithms :

Write your own algorithms

Flowchart :

Draw flowchart for above algorithms.

**Conclusion:**By this way, we can perform expression conversion as infix to postfix and its evaluation using stack.

**Question Bank:**

1. What is Stack?
2. Which are the different operations that can be performed on stack?
3. Explain PUSH, POP operations on stack
4. What are the applications of stack?
5. What is infix, postfix and prefix expression?
6. Conversion – infix to postfix, infix to prefix , etc
7. Evaluation of infix, postfix and prefix expressi