DSA   Assignment # 1

Note: Submit a single zip file having single cpp file for each question. All questions must have a menu to test each function e.g.

```
**** Menu *****
Press 1 for….
Press 2 for…
Press 3 for…
Press 0 for Quit
***************
```

Q1: Implement following methods (functions) using template based **stack** class (**implemented with array without vector**)

    a)   Infix to Postfix and Prefix conversion
    b)   Postfix to Infix and Prefix conversion
    c)   Prefix to Infix and Postfix conversion

Q2: Implement following methods (functions) using template based **stack** class (**implemented with array without vector**)

    a)   Evaluation of Infix Expression
    b)   Evaluation of Postfix Expression
    c)   Evaluation of Prefix Expression

Q3: Implement a template-based **circular queue** using a fixed-sized array. The required member methods are:

    int size() : returns total element stored in the queue.
    bool isEmpty(): returns true if the queue is empty else false.
    T & front(): returns, but does not delete, the front element from the queue. If there is no element, return some error.
    void dequeue(): deletes the front element from the queue. If there is no element, return some error.
    Void enqueue(T const& e): inserts the element "e" at the back of the queue if there is some space available. Otherwise it returns some error.