

## UID – 22BCS10645(AASHIMA NARULA)

### 8. Implement Stack using Queue

```
class MyStack {  
private:  
    queue<int> q1, q2;  
  
public:  
    MyStack() {}  
  
    void push(int x) {  
        q2.push(x);  
  
        while (!q1.empty()) {  
            q2.push(q1.front());  
            q1.pop();  
        }  
  
        swap(q1, q2);  
    }  
  
    int pop() {  
        int topElement = q1.front();  
        q1.pop();  
        return topElement;  
    }  
}
```

```

int top() {
    return q1.front();
}

bool empty() {
    return q1.empty();
}

};

```

**Accepted** 18 / 18 testcases passed  
 Aashima Narula submitted at Mar 19, 2025 23:23

**Runtime** 0 ms | Beats 100.00%  
**Memory** 9.46 MB | Beats 53.08%

**Code**

```

class MyStack {
private:
    queue<int> q1, q2;
public:
    MyStack() {}
    void push(int x) {
        q2.push(x);
        while (!q1.empty()) {
            q2.push(q1.front());
            q1.pop();
        }
    }
}

```

**Testcase** **Test Result**

**Accepted** Runtime: 0 ms

**Case 1**

**Input**

["MyStack", "push", "push", "top", "pop", "empty"]

[[], [], [2], [], [], []]

**Output**

[null, null, null, 2, false]

**Expected**

[null, null, null, 2, false]

