

Imp. Stack By use of 2 QUEUE

```
import java.util.*;

class Q {

    Stack<Integer> in = new Stack<>();

    Stack<Integer> out = new Stack<>();


    void add(int x) {

        in.push(x);}


    int remove() {

        shift();

        return out.pop();  }


    int peek() {

        shift();

        return out.peek();}


    boolean isEmpty() {

        return in.isEmpty() && out.isEmpty();}


    void shift() {

        if (out.isEmpty())

            while (!in.isEmpty())

                out.push(in.pop());}}
```

Queue by 2 stack

```
import java.util.*;

class Stack {

    Queue<Integer> q1 = new LinkedList<>();

    Queue<Integer> q2 = new LinkedList<>();

    void push(int x) {

        q2.add(x);

        while (!q1.isEmpty()) {

            q2.add(q1.remove());

        }

        // swap

        Queue<Integer> temp = q1;

        q1 = q2;

        q2 = temp;

    }

    int pop() {

        return q1.remove();

    }

    int peek() {

        return q1.peek();

    }

    boolean isEmpty() {

        return q1.isEmpty();

    }

}
```