

Q by 2 stack



```
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());}}
```



```
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();}}
```