

<https://course.acciojob.com/idle?question=93dd0fcc-6190-4f41-b279-78580840984b>

● EASY

● Max Score: 30 Points

●

Implement Queue using stacks

Implement Queue using two queue $s1$ and $s2$. You need to complete the push and pop function of Queue class. You are given 2 types of query 1 for push an integer into queue and 2 for enqueue the value from the queue and print.

Input Format

First line contains q of queries.

Followed by q lines.

Query of type 1 is followed by an integer x to push element in the queue.

Query of type 2 is for dequeue the last value from the queue and print.

Output Format

Print the value for dequeue operations in the query given.

Example 1

Input

```
5
1 2
1 3
2
1 4
2
```

Output:

2 3

Explanation

First we push 2 , then for second query we push 3, for third query we dequeue 2 and print, for 4th query we push 4 and for 5th query we dequeue 3 and print.

Example 2

Input

```
3
2
1 2
2
```

Output:

```
-1 2
```

Explanation:

In the first query we don't have any element but we use dequeue query so we print -1, in the 2nd query we push 2 and in the 3rd we dequeue 2 and print 2.

Constraints

1 <= Total number of queries <= 100

1 <= value in each query <= 100

Topic Tags

- **Queues**
- **Stacks**

My code

// in java

```
import java.io.*;
```

```
import java.util.*;
```

```
class StackQueue
```

```
{
```

```
    Stack<Integer>st;
```

```
    Stack<Integer>st2;
```

```
    public StackQueue()
```

```
    {
```

```
        st=new Stack<>();
```

```
        st2=new Stack<>();
```

```
    }
```

```
//Function to push an element in queue by using 2 stacks.
```

```
void Push(int x)
```

```
{
```

```
    //Write your code here
```

```
    st.push(x);
```

```
}
```

```
//Function to pop an element from queue by using 2 stacks.
```

```
int Pop()
```

```
{
```

```
    //Write your code here
```

```
    while(!st.isEmpty())
```

```
    {
```

```
        st2.push(st.pop());
```

```
    }
```

```
    if(st2.isEmpty())
```

```

        return -1;
        int r=st2.pop();

        //re areng
        while(!st2.isEmpty())
        {
            st.push(st2.pop());
        }
        return r;
    }
}

public class Main {
    public static void main(String args[]) throws IOException {
        Scanner sc = new Scanner(System.in);
        StackQueue s = new StackQueue();
        int q = sc.nextInt();
        ArrayList<Integer> ans= new ArrayList<>();
        while(q>0)
        {
            int QueryType = sc.nextInt();
            if(QueryType == 1)
            {
                int a = sc.nextInt();
                s.Push(a);
            }
            else if(QueryType == 2)
                ans.add(s.Pop());
            q--;
        }
        for(int x:ans)
            System.out.print(x+" ");
        System.out.println();
    }
}

```

}

}