https://course.acciojob.com/idle?question=06476864-88f7-478c-bff1-94797c7556b1

- EASY
- Max Score: 30 Points

Implement Stack using Queue-push O(1)

Implement stack using two queues. You need to complete the push and pop function of stack class. You are given 2 types of queries-

'1' which represents that we need to push an integer into the stack.

'2' which represents that we need to pop the top element from the stack. If there is no top element simply return -1.

Note: Make the push operation O(1).

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 stack.

Query of type `2` is for pop the top value from the stack and print it.

Output Format

Print the value for pop operations in the query given.

Example 1

Input

```
5
1 2
```

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

Output:

```
3 4
```

Explanation:

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

Example 2

Input

```
3
2
1 2
2
```

Output:

```
-1 2
```

Explanation:

In the first query we dont have any element but we use pop query so we print -1, in the 2nd query we push 2 and in the 3rd we pop 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 Stack
{
   Queue<Integer> q;

    public Stack() {
        q = new LinkedList<Integer>();
    }
    void push(int a)
    {
        // your code here
                q.offer(a);
        for (int i = 0; i < q.size() - 1; i++)
            q.offer(q.poll());
    }

    int pop()
    {
        // your code here
                if(q.isEmpty())
                        return -1;
                 return q.poll();
    }
}
```

```
public class Main {
    public static void main(String args[]) throws IOException {
        Scanner sc = new Scanner(System.in);
        Stack g = new Stack();
        int q = sc.nextInt();
        while(q>0)
        {
            int QueryType = sc.nextInt();
            if(QueryType == 1){
                int a = sc.nextInt();
                                g.push(a);
                    // call push function here
            }
            else if(QueryType == 2){
                    // call pop function here

                                        System.out.print(g.pop()+" ");
            }
            q--;
        }
    }
}
```