### https://course.acciojob.com/idle?question=dbb19e7c-f100-4b90-9e98-b3c8916d3b29

- EASY
- Max Score: 30 Points
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# Implement Queue using stack - Dequeue O(1)

Implement Queue using two stack 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.

Note: implement deQueue in O(1)

#### **Input Format**

First line contains q of queries.

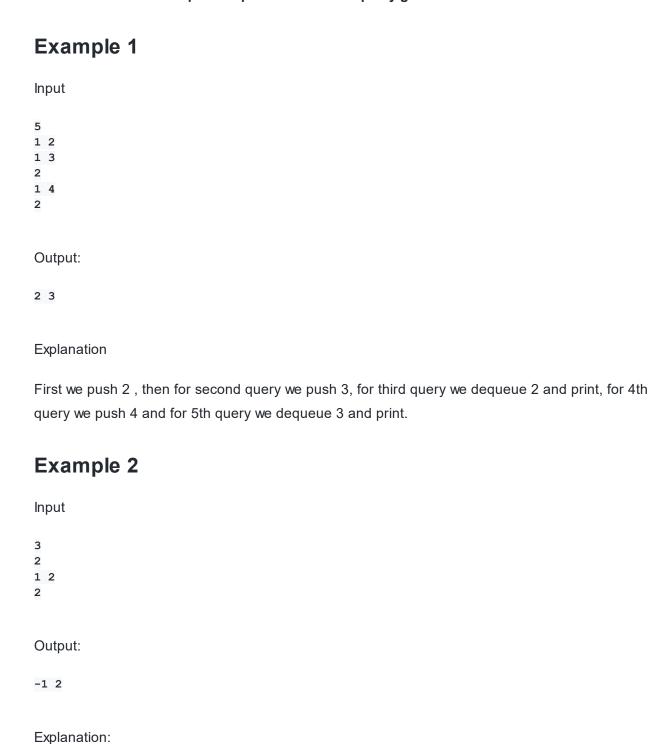
Followed by q lines.

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



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</pre>
```

#### **Topic Tags**

- Queues
- Stacks

## My code

```
// n java
import java.io.*;
import java.util.*;

class StackQueue
{
     Stack<Integer>st1;
     Stack<Integer>st2;
     public StackQueue()
     {
          st1=new Stack<>();
          st2=new Stack<>();
     }

//Function to push an element in queue by using 2 stacks.
     void Push(int x)
     {
}
```

```
//Write your code here
      st1.add(x);
  //Function to pop an element from queue by using 2 stacks.
  int Pop()
  {
          int t=-1;
       //Write your code here
       while(!st1.isEmpty())
               st2.add(st1.pop());
          if(!st2.isEmpty())
           t=st2.pop();
           while(!st2.isEmpty())
                st1.add(st2.pop());
          return t;
  }
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();
    }
}
```