

Queries Again

Problem

Submissions

Leaderboard

Discussions

Problem Statement

You have a doubly linked list which is **empty** initially. Then you will be given **Q** queries. In each query you will be given two values **X** and **V**.

- You need to insert the value **V** at index **X**. Assume that index starts from 0.
- After that for each query you need to print the linked list from left to right and right to left.
- If the index is invalid, then print "Invalid".

Note: You must use **Doubly Linked List**, otherwise you will not get marks.

Input Format

- First line will contain **Q**.
- Next **Q** lines will contain **X** and **V**.

Constraints

1. $1 \leq Q \leq 1000$;
2. $0 \leq X \leq 1000$;
3. $0 \leq V \leq 1000$

Output Format

- For each query print the linked list from left to right and right to left or print "Invalid" as asked.
- Print "L -> " before printing the linked list from left to right.
- Print "R -> " before printing the linked list from right to left.

Sample Input 0

```
5
1 10
0 10
1 20
3 30
2 30
```

Sample Output 0

```
Invalid
L -> 10
R -> 10
L -> 10 20
R -> 20 10
Invalid
L -> 10 20 30
R -> 30 20 10
```

Sample Input 1

```
10
0 10
1 20
0 30
1 40
6 50
0 60
4 70
4 80
2 90
1 100
```

Sample Output 1

```
L -> 10
R -> 10
L -> 10 20
R -> 20 10
L -> 30 10 20
R -> 20 10 30
L -> 30 40 10 20
R -> 20 10 40 30
Invalid
L -> 60 30 40 10 20
R -> 20 10 40 30 60
L -> 60 30 40 10 70 20
R -> 20 70 10 40 30 60
L -> 60 30 40 10 80 70 20
R -> 20 70 80 10 40 30 60
L -> 60 30 90 40 10 80 70 20
R -> 20 70 80 10 40 90 30 60
L -> 60 100 30 90 40 10 80 70 20
R -> 20 70 80 10 40 90 30 100 60
```



Submissions: [457](#)

Max Score: 20

Difficulty: Easy

Rate This Challenge:



[More](#)

C++20



```
1 #include <bits/stdc++.h>
2
3 using namespace std;
4
5
6
7 int main()
8 {
9     // Write your code here
10
11     return 0;
12 }
13
```

Line: 1 Col: 1

[Upload Code as File](#) ☐ [Test against custom input](#)

[Run Code](#)

[Submit Code](#)

