All Contests > Assignment 02 | Basic Data Structures | Batch 03 > Queries

Queries

Problem	Submissions	Leaderboard	Discussions

Problem Statement

You have a singly 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.

- If X is 0 that means you will insert the value V to the head of the linked list.

- And if X is 1 then you will insert the value V to the tail of the linked list.

- After that for each query you need to print the value of the **head** and **tail** of the list.

Note: You must use singly 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. $1 <= Q <= 10^6$;

2. $0 <= X <= 1$;

3. $0 <= V <= 10^9$

Output Format

- For each query ouput the value of head and tail of the linked list.

Sample Input 0

```
5
0 10
0 20
1 30
0 40
1 50
```

Sample Output 0

```
10 10
20 10
20 30
40 30
40 50
```

Explanation 0

```
Query 1: 10 is inserted at head. Linked list looks like: 10->NULL. Now both head and tail are 10.
Query 2: 20 is inserted at head. Linked list looks like: 20->10->NULL. Now head is at 20 and tail is at 10.
Query 3: 30 is inserted at tail. Linked list looks like: 20->10->30->NULL. Now head is at 20 and tail is at 30.
Query 4: 40 is inserted at head. Linked list looks like: 40->20->10->30->NULL. Now head is at 40 and tail is at 30.
Query 5: 50 is inserted at tail. Linked list looks like: 40->20->10->30->50->NULL. Now head is at 40 and tail is at 50.
```

Sample Input 1

```
3
1 10
1 20
0 30
```

Sample Output 1

```
10 10
10 20
30 20
```

Explanation 1

```
Query 1: 10 is inserted at tail. Linked list looks like: 10->NULL. Now both head and tail are 10.
Query 2: 20 is inserted at tail. Linked list looks like: 10->20->NULL. Now head is at 10 and tail is at 20.
Query 3: 30 is inserted at head. Linked list looks like: 30->10->20->NULL. Now head is at 30 and tail is at 20.
```

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Submissions: 96
Max Score: 20
Difficulty: Easy

Rate This Challenge:
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More

C++20 ▾   ⤢   ⚙

```cpp
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

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