

Linked List 2

Given a number, write a c function to check if the number, X, is palindrome or not. A number is Palindrome if it reads same from front as well as back. For example, 5445 is palindrom number as its read same from both sides. If the numer is palindrome, then print "YES". Otherwise, print "NO".

You have to read the input and store it digit by digit in a linked list.

Input Format

One line of input contains an integer, X.

Constraints

- $-2^{31} \leq X \leq 2^{31} - 1$

Output Format

Print "YES" or "NO"

Sample Input 0

121

Sample Output 0

YES

Sample Input 1

54276

Sample Output 1

NO

Stack Operations

Assume that you have to solve a problem of finding minimum by using a stack. The program should take as input, number of operations Q. Each operation can be one of the below.

- **1 E** -Push an element E into the stack.
- **2** -Delete the element at the top of the stack.
- **3** -Print the minimum element in the stack.

You have to implement a function for each operation and print the minimum element when requested. If the stack is empty and you operation is 3, then print "Empty".

Input Format

The first line of input contains an integer, Q. The next Q lines each contains an operation like the mentioned above.

Constraints

- $1 \leq Q \leq 10^6$
- $1 \leq E \leq 10^9$

Output Format

Print the minimum number in the stack when requested.

Sample Input 0

```
10
1 5
2
1 43
1 20
1 50
3
1 84
2
1 2
3
```

Sample Output 0

```
20
2
```

Sample Input 1

```
5
1 100
1 43
2
1 50
3
```

Sample Output 1

```
50
```

Linked List 3 (BONUS)

This is a BONUS problem

Write a C program to read numbers, store them in a linked list, reverse each group of N nodes and print the result. If the last group is less than N, then leave its nodes out without change.

Input Format

The first line contains two integers S and N, where S is the number of elements in the list and N is the group size of the nodes to be reversed. Each of the next lines contains an integer represents an element in the list.

Constraints

- $1 \leq Q \leq 10000$
- $1 \leq k \leq 10^9$
- $-2^{31} \leq \text{each number} \leq 2^{31} - 1$

Output Format

Print the elements of the linked list after modification.

Sample Input 0

```
5 3
10
9
8
7
6
```

Sample Output 0

```
8
9
10
7
6
```

Explanation 0

- $10 \rightarrow 9 \rightarrow 8 \rightarrow 7 \rightarrow 6$
- Reverse nodes in groups of $N=3$
- The first group of 3 is $10 \rightarrow 9 \rightarrow 8$ will be reversed to $8 \rightarrow 9 \rightarrow 10$
- The second group is less than 3 and remain as it is $7 \rightarrow 6$
- The final result is $8 \rightarrow 9 \rightarrow 10 \rightarrow 7 \rightarrow 6$

Sample Input 1

```
5 1
3
5
7
9
11
```

Sample Output 1

```
3
5
7
9
11
```