

```
#include<iostream>
```

```
Using namespace std;
```

```
Template<typename T>
```

```
Class Stack
```

```
{
```

```
Private:
```

```
    Struct Node
```

```
    {
```

```
        T value;
```

```
        Node* prev;
```

```
        Node* nxt;
```

```
        Node(T nwvalue){value = nwvalue;}
```

```
    };
```

```
    Node* top=NULL;
```

```
    Int size=0;
```

```
Public:
```

```
    Void push(T item)
```

```
    {
```

```
        If(top == NULL)
```

```
            Top = new Node(item);
```

```
        Else
```

```
        {
```

```
            Node* temp = new Node(item);
```

```
            Top→nxt=temp;
```

```
            Temp→prev=top;
```

```
            Top=temp;
```

```
        }
```

```
        Size++;
```

```
}
```

```
T pop()
```

```
{
```

```
    Size--;
```

```
    Node ret = *top;
```

```
    Top=top->prev;
```

```
    Return ret.value;
```

```
}
```

```
Int getsize(){return size;}
```

```
};
```

```
Int main()
```

```
{
```

```
    Stack<char> mystack;
```

```
    String input;
```

```
    Cin>>input;
```

```
    For(int i=0;i<input.size();i++)
```

```
        Mystack.push(input[i]);
```

```
    Bool isPalindrome=1;
```

```
    For(int i=0;i<input.size();i++)
```

```
    {
```

```
        If(input[i] != mystack.pop())
```

```
        {
```

```
            isPalindrome=0;
```

```
            break;
```

```
        }
```

```
}  
If(isPalindrome)  
    Cout<<"\nYES, the text is palindrome\n";  
Else  
    Cout<<"\nNO, the text is NOT palindrome\n";  
  
Return 0;  
}
```