HW_Remove Outermost Parentheses 4

A valid parentheses string is either empty "", "(" + A + ")", or A + B, where A and B are valid parentheses strings, and + represents string concatenation.

Return s after removing the outermost parentheses of every primitive string in the primitive decomposition of s.

Input Format

The first line be String S .

Constraints

1 <= s.length <= 10^5

s[i] is either '(' or ')'.

s is a valid parentheses string.

Output Format

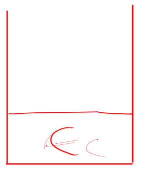
Return s after removing the outermost parentheses of every primitive string in the primitive decomposition of s.

Sample Input 0

```
(()())(())
```

Sample Output 0

```
()()()
```



st if push string

else pop

string = ()

if ('(')
st.isEmpty

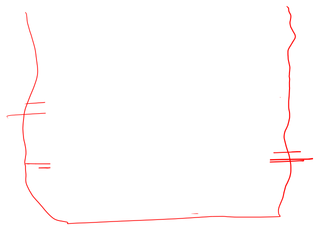
str = ( ) (( ))

(( ) (( )))

if ('(')

if (is+) {
str=
}
st.push('(');

else
if (is+)
str=
st.pop( )



str = ( ) ( ) ( )

str = ( )

Submitted Code

Language: Java 15

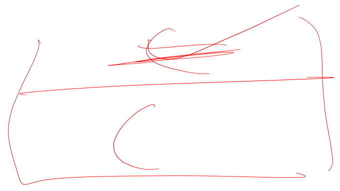
```java
import java.io.*;
import java.util.*;

public class Solution {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        String str =sc.nextLine();
        Stack<Character> st = new Stack<>();
        String ans ="";

        for(int i=0;i<str.length();i++){
            char ch = str.charAt(i);
            if(ch=='('){
                if(!st.isEmpty())ans+=ch;
                st.push(ch);
            }else{
                if(st.size()>1)ans+=ch;
                st.pop();
            }
        }

        System.out.print(ans);
    }
}
```



str = ( )