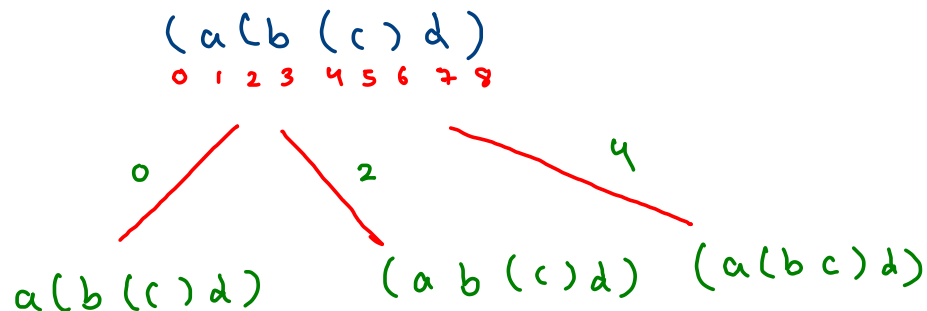


1249. Minimum Remove to Make Valid Parentheses

example

(a(b(c)d) this string has (a(bc)d), (ab(c)d) and a(b(c)d) 3 valid strings.
Among all 3 valid strings a(b(c)d) has the innermost parentheses.



a (b (c) d

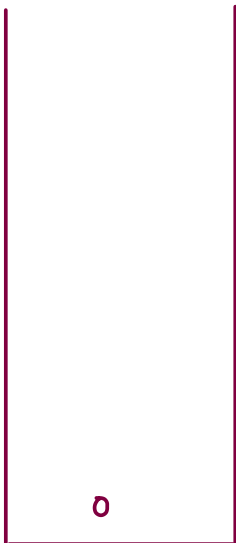
0 1 2 3 4 5 6 7

L, a b (c) d



~~(a(b(c)d))~~

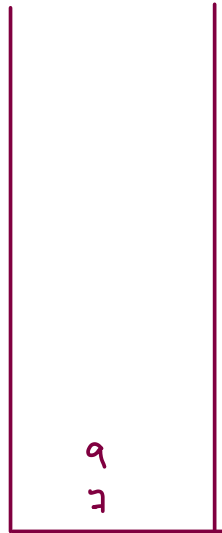
0 1 2 3 4 5 6 7 8



↳ a(b(c)d)

(a(b))c~~d~~

0 1 2 3 4 5 6 7 8 9



↳ (a(b))c

```

for(int i=0; i < s.length();i++) {
    char ch = s.charAt(i);

    if(ch == '(') {
        st.push(i);
    }
    else if(ch == ')'){
        if(st.size() > 0 && s.charAt(st.peek()) == '(') {
            st.pop();
        }
        else {
            st.push(i);
        }
    }
}

```

```

char[] arr = s.toCharArray();

```

```

while(st.size() > 0) {
    int idx = st.pop();
    arr[idx] = '.';
}

```

```

StringBuilder sb = new StringBuilder();

```

```

for(int i=0; i < arr.length;i++) {
    if(arr[i] != '.') {
        sb.append(arr[i]);
    }
}

```

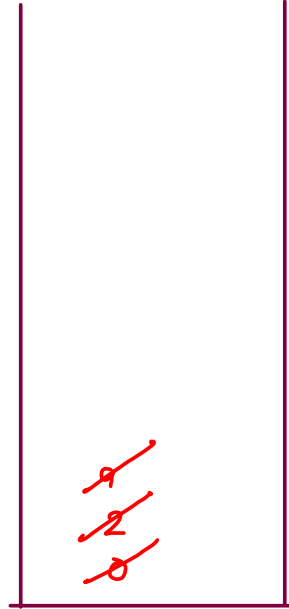
```

return sb.toString();

```

~~t~~a ~~t~~b (e e) d ~~t~~g
 0 1 2 3 4 5 6 7 8 9 10

↪ ab(ee)dg

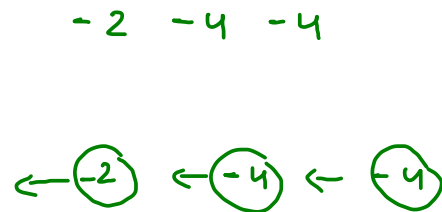
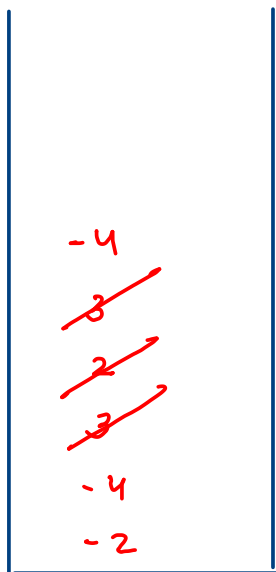


735. Asteroid Collision

```
for(int i=0; i < asteroids.length;i++) {
    int val = asteroids[i];

    if(st.size() > 0 && st.peek() > 0 && val < 0) {
        while(st.size() > 0 && st.peek() > 0 && st.peek() < -val) {
            st.pop();
        }
        if(st.size() > 0 && st.peek() == -val) {
            st.pop();
        }
        else if(st.size() > 0 && st.peek() > -val){
            continue;
        }
        else {
            st.push(val);
        }
    }
    else {
        st.push(val);
    }
}
```

$-2 \quad -4 \quad \cancel{3} \quad \cancel{2} \quad \cancel{-1} \quad \cancel{3} \quad \cancel{-3} \quad \cancel{5} \quad -4$



1003. Check If Word Is Valid After Substitutions

Medium  527  429  Add to List  Share

Given a string `s`, determine if it is **valid**.

A string `s` is **valid** if, starting with an empty string `t = ""`, you can **transform** `t` **into** `s` after performing the following operation **any number of times**:

- Insert string `"abc"` into any position in `t`. More formally, `t` becomes `tleft + "abc" + tright`, where `t == tleft + tright`. Note that `tleft` and `tright` may be **empty**.

Return `true` if `s` is a **valid** string, otherwise, return `false`.

a a b c b c

"",
↓ abc
abc
0 1 2
↓ after 0
a abc b c

Example 1:

Input: s = "aabcabc"

Output: true

Explanation:

"" -> "abc" -> "aabcbc"

Thus, "aabcabc" is valid.

abcabcababcc

Example 2:

Input: s = "abcabcababcc"

Output: true

Explanation:

"" -> "abc" -> "abcabc" -> "abcabcabc" -> "abcabcababcc"

Thus, "abcabcababcc" is valid.

Example 3:

Input: s = "abccba"

Output: false

Explanation: It is impossible to get "abccba" using the operation.

" "



abc



abcabc



abcabcabc



abcabcababcc

$s = abccba$

