Regex Substitution



The *re.sub()* tool (*sub* stands for *substitution*) evaluates a pattern and, for each valid match, it calls a *method* (or *lambda*).

The method is called for all matches and can be used to modify strings in different ways.

The *re.sub()* method returns the modified string as an output.

Learn more about re. sub().

Transformation of Strings

Code

```
import re

#Squaring numbers
def square(match):
    number = int(match.group(0))
    return str(number**2)

print re.sub(r"\d+", square, "1 2 3 4 5 6 7 8 9")
```

Output

1 4 9 16 25 36 49 64 81

Replacements in Strings

Code

```
import re

html = """
<head>
<titile>HTML</titile>
</head>
<object type="application/x-flash"
data="your-file.swf"
width="0" height="0">
<!-- <param name="movie" value="your-file.swf"/> -->
<param name="quality" value="high"/>
</object>
"""

print re.sub("(<!--.*?-->)", "", html) #remove comment
```

Output

```
<head>
<title>HTML</title>
</head>
<object type="application/x-flash"
data="your-file.swf"
width="0" height="0">

<param name="quality" value="high"/>
</object>
```

Task

You are given a text of N lines. The text contains && and $|\ |\ |$ symbols.

Your task is to modify those symbols to the following:

```
&& \rightarrow and || \rightarrow or
```

Both && and | | should have a *space* " " on both sides.

Input Format

The first line contains the integer, N.

The next N lines each contain a line of the text.

Constraints

```
0 < N < 100
```

Neither && nor | occur in the start or end of each line.

Output Format

Output the modified text.

Sample Input

```
11
a = 1;
b = input();

if a + b > 0 && a - b < 0:
    start()
elif a*b > 10 || a/b < 1:
    stop()
print set(list(a)) | set(list(b))
#Note do not change &&& or ||| or & or |
#Only change those '&&' which have space on both sides.
#Only change those '|| which have space on both sides.
```

Sample Output

```
a = 1;
b = input();
if a + b > 0 and a - b < 0:
    start()
elif a*b > 10 or a/b < 1:
    stop()
print set(list(a)) | set(list(b))
#Note do not change &&& or ||| or & or |
#Only change those '&&' which have space on both sides.
#Only change those '|| which have space on both sides.
```