

Incorrect Regex

You are given a string S .

Your task is to find out whether S is a valid [regex](#) or not.

Input Format

The first line contains integer T , the number of test cases.

The next T lines contains the string S .

Constraints

$$0 < T < 100$$

Output Format

Print "True" or "False" for each test case without quotes.

Sample Input

```
2
.*\+
.*+
```

Sample Output

```
True
False
```

Explanation

`.*\+` : Valid regex.

`.*+`: Has the error `multiple repeat`. Hence, it is invalid.