



## Day 28: RegEx, Patterns, and Intro to Databases!

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Problem

Submissions

Leaderboard

Discussions

Welcome to Day 28! Check out an [Introduction to Databases](#), or jump into the challenge. We haven't discussed *RegEx* (Regular Expressions) yet, but that's okay! Review the [Pattern documentation](#), learn what it can do, and apply your new knowledge to this challenge!

*RegEx* helps us easily search for or match a *Pattern* in text. Before searching for a *Pattern*, we must specify it using some well-defined syntax.

Given a string, determine if it's a valid *Pattern* or not. The string may contain spaces.

**Note:** This is a java only challenge, a *RegEx* is only valid if you can *compile* it using the [Pattern.compile](#) method. You may find using a *try-catch* block helpful here.

### Input Format

The first line of input contains an integer,  $T$  (the number of test cases).  
The  $T$  subsequent lines of test cases each contain a string of characters describing a *RegEx*.

### Constraints

$$1 \leq T \leq 100$$

### Output Format

On a new line for each test case, print **Valid** if the given *RegEx*'s syntax is correct; otherwise, print **Invalid**.

### Sample Input

```
3
([A-Z])(.+)
[AZ[a-z](a-z)
batcatpat(nat
```

### Sample Output

```
Valid
Invalid
Invalid
```

### Explanation

The second and third test cases have unbalanced brackets and will throw a [PatternSyntaxException](#) when compiled. For example:

`[AZ[a-z](a-z)` is **Invalid**, but `[AZ[a-z](a-z)]` would be **Valid**.



`batcatpat(nat` is **Invalid**, but `batcatpat(nat)` would be **Valid**.


Submissions: 1892



Max Score: 100

Difficulty: Easy

[More](#)

Current Buffer (saved locally, editable)  

C++



```
1 #include <cmath>
2 #include <cstdio>
3 #include <vector>
4 #include <iostream>
5 #include <algorithm>
6 using namespace std;
7
8
9 int main() {
10     /* Enter your code here. Read input from STDIN. Print output to STDOUT */
11     return 0;
12 }
13
```

Line: 1 Col: 1

 [Upload Code as File](#)

Test against custom input

Run Code

Submit Code

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