

Every submission at HackerRank has a field called language which indicates the programming language which a hacker used to code his solution.

C:CPP:JAVA:PYTHON:PERL:PHP:RUBY:CSHARP:HASKELL:CLOJURE:BASH:SCALA:  
ERLANG:CLISP:LUA:BRAINFUCK:JAVASCRIPT:GO:D:OCAML:R:PASCAL:SBCL:DART:  
GROOVY:OBJECTIVEC

Sometimes, error-prone API requests can have an invalid language field. Could you find out if a given submission has a valid language field or not?

## Input Format

First line contains N. N API requests follow, each in a newline. Each request has an integer api\_id and a string *language* which are the request parameters placed by the an API request.

## Constraints

```
1 <= N <= 100  
10^4 <= api_id < 10^5
```

a valid language is any of the languages listed above (case sensitive):

## Output Format

For every api request given in input, print "VALID" if it has a valid language string in it or print "INVALID" otherwise.

## Sample Input

```
3  
11011 LUA  
11022 BRAINFUCK  
11044 X
```

## Sample Output

```
VALID  
VALID  
INVALID
```

## Explanation

LUA and BRAINFUCK are valid languages as listed above. As X is doesn't appear in the list, it is an invalid request.