

Detect Floating Point Number

Check [Tutorial](#) tab to know how to solve.

You are given a string N .

Your task is to verify that N is a floating point number.

In this task, a valid float number must satisfy *all* of the following requirements:

> Number can start with `+`, `-` or `.` symbol.

For example:

✓ +4.50

✓ -1.0

✓ .5

✓ -.7

✓ +.4

✗ `++4.5`

> Number must contain *at least* **1** decimal value.

For example:

✗ `12.`

✓ 12.0

> Number must have exactly one `.` symbol.

> Number must not give any exceptions when converted using *float(N)*.

Input Format

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

The next T line(s) contains a string N .

Constraints

- $0 < T < 10$

Output Format

Output *True* or *False* for each test case.

Sample Input 0

```
4
4.000
-1.00
+4.54
SomeRandomStuff
```

Sample Output 0

```
False
True
True
False
```

Explanation 0

4.000: *O* is not a digit.

−1.00: is valid.

+4.54: is valid.

SomeRandomStuff: is not a number.