



Practice > Python > Regex and Parsing > Detect Floating Point Number

Detect Floating Point Number ☆

44/115 challenges solved

Rank: 12108 | Points: 725



Your Detect Floating Point Number submission got 20.00 points.

Share

Tweet

[Try the next challenge](#) | [Try a Random Challenge](#)**Problem**

Submissions

Leaderboard

Discussions

Editorial

Tutorial

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 FormatOutput *True* or *False* for each test case.**Sample Input 0**

```
4
4.000
-1.00
```

Author

DOSHI

Difficulty

Easy

Max Score

20

Submitted By

10906

NEED HELP?[View tutorial](#)[View discussions](#)[View editorial](#)[View top submissions](#)**RATE THIS CHALLENGE****MORE DETAILS**[Download problem statement](#)[Download sample test cases](#)[Suggest Edits](#)

```
+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.

Current Buffer (saved locally, editable)



Python 3



```
1 import re
2 for i in range(int(input())):
3     print(bool(re.match(r'^[+-]?[0-9]*\.[0-9]+$', input())))
```

Line: 3 Col: 44

Upload Code as File

☐ Test against custom input

Run Code

Submit Code



You have earned 20.00 points!
44/115 challenges solved.

38%

Congratulations

You solved this challenge. Would you like to challenge your friends?

**Next
Challenge**

Testcase 0

Testcase 1

Testcase 2

Testcase 3

18 Testcases

Input (stdin)

[Download](#)

Expected Output

[Download](#)

```
4
4.000
-1.00
1.1 5.1
```

```
False
True
True
False
```

Compiler Message

Success[Contest Calendar](#) | [Blog](#) | [Scoring](#) | [Environment](#) | [FAQ](#) | [About Us](#) | [Support](#) | [Careers](#) | [Terms Of Service](#) | [Privacy Policy](#) | [Request a Feature](#)