



Detect Floating Point Number ★

58/115 challenges solved

Rank: 42767 | Points: 695



Your Detect Floating Point Number submission got 20.00 points.

[Share](#)[Tweet](#)[Try the next challenge](#) | [Try a Random Challenge](#)[Problem](#)[Submissions](#)[Leaderboard](#)[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 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: 0 is not a digit.

-1.00: is valid.

+4.54: is valid.

SomeRandomStuff: is not a number.

[Change Theme](#)

Python 3



```
1 def is_valid_float(case):
2     try:
3         if case == '0':
4             return False
5
6         float(case)
7
8         return True
9     except:
10        return False
11
12 if __name__ == "__main__":
13     t = int(input())
14     cases = [input() for _ in range(t)]
15
16     for c in cases:
17         print(is_valid_float(c))
18
```

Line: 14 Col: 40

[Upload Code as File](#) ☐ Test against custom input[Run Code](#)[Submit Code](#)

You have earned 20.00 points!

58/115 challenges solved.

50%



Congratulations

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

[Next Challenge](#)[Test case 0](#)

Compiler Message

Test case 1

Test case 2

Test case 3

Test case 4

Test case 5

Test case 6

Success

Input (stdin)

14

24.000

3-1.00

4+4.54

5SomeRandomStuff

Expected Output

1False

2True

Download

Download