
Number of peaks in input numbers**X25987_en**

Given a natural number n , a peak in n are three consecutive digits of the representation in base 10 of n such that the one in the middle is strictly greater than the other two surrounding it.

Write a program that reads input numbers and counts how many peaks there are in each of them.

For example, with input 192056423 it must print 2.

Input

The input has an arbitrary number of cases. Each case has a positive natural number in one line.

Output

For each case, there is one line with the corresponding number of peaks.

Sample input 1

```
1
5
10
111
121
983702120
132436475
123456789
987654321
35102
785902
1010101
101010
10101
30219834
123321233
410938
899999995
999999
113311
13221
2
3
1234567890
```

Sample output 1

```
0
0
0
0
1
3
4
0
0
1
2
2
2
2
1
1
2
0
1
0
0
1
0
0
0
1
```

Sample input 2

```
391430
783080367
109
2
29
2145601
3
```

```
8634
29449099
5292
5594
601921
43
425002
66332951
```

```
584707801
360981924
38480663
8882
5
4165874
57193
6
121277986
4844
7836
705250
6818
72153
99939
9622733
50215
991627275
201
4
52250
239189939
8
3239
6153
10523787
49
939488
4478644
12
89
418191
929814854
125886
11047
```

Sample output 2

```
2
2
0
0
0
1
0
0
2
1
1
1
0
1
1
3
3
2
0
2
2
0
0
1
1
0
0
1
2
0
1
1
0
0
2
2
0
0
```

Observation

It is not allowed to use any massive storage data structure, not even `string`. Please solve this exercise by just using type `int` and manipulating integers with the basic operators `(+, -, *, /, %)`.

Assessment over 10 points:

- Slow solution: 5 points.
- Fast solution: 10 points.

We understand as fast solution one being correct, with linear cost and able to overcome both the public and private tests. We understand as slow solution one not being fast, but correct and able to overcome the public tests.

Problem information

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