Quick Estimates

Let's face it... you are not that handy. When you need to make a major home repair, you often need to hire someone to help. When they come for the first visit, they make an estimate of the cost. Here they must be careful: if they overestimate the cost, it might scare you off, but if they underestimate, the work might not be worth their time.

Because the worker is so careful, it can take a long time for them to produce the estimate. But that's frustrating — when you ask for an estimate, you really are asking for the magnitude of the cost. Will this be \$10 or \$100? That's all you really want to know on a first visit.



Photo by Simon A. Eugster

CPU Time limit: 1 second **Memory limit:** 1024 MB **Difficulty:** 1.5

Problem ID: quickestimate

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Please help the worker make the type of estimate you desire. Write a program that, given the worker's estimate, reports just the magnitude of the cost — the number of digits needed to represent the estimate.

Input

Input begins with a line containing an integer N ($1 \le N \le 100$). The next N lines each contain one estimated cost, which is an integer between 0 and 10^{100} . (Some of the workers overcharge quite a bit.)

Output

For each estimated cost, output the number of digits required to represent it.

Sample Input 1

	5	
	314	
	1	
	5926	
	5	
	35897	
- 1		

Sample Output 1

3		
1		
4		
1		
5		

Sample Input 2



Sample Output 2

1			
2			
3			
			_