Problem J
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.



Photo by Simon A. Eugster

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 or $1 000? That's all you really want to know on a first visit.

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 ($1 \leq N \leq 100$). The next N lines each contain one estimated cost, which is an integer between 0 and 10^{100}. (Some of the workmen overcharge quite a bit.)

Output

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

Sample Input 1	Sample Output 1
5 314 1 5926 5 35897	3 1 4 1 5

Sample Input 2	Sample Output 2
3 0 10 100	1 2 3

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