

**Sardar Vallabhbhai National Institute of Technology
Surat-395007**

Web Programming and Python (AI104)

Assignment – 2

1. Write a program that asks the user to enter a word and then capitalizes every other letter of that word. So, if the user enters rhinoceros, the program should print rHiNoCeRoS.
2. Write a program that repeatedly asks the user to enter product names and prices. Store all of these in a dictionary whose keys are the product names and whose values are the prices. When the user is done entering products and prices, allow them to repeatedly enter a product name and print the corresponding price or a message if the product is not in the dictionary.

3. Find Digits

You are given a number N , you need to print the number of positions where digits exactly divides N .

Input format

The first line contains T (number of test cases followed by T lines each containing N).

Constraints

$$1 \leq T \leq 15$$

$$0 \leq N \leq 10^{10}$$

Output Format

For each test case print the number of positions in N where digits in that number exactly divides the number N in separate line.

Input

2

12

13

Output

2

1

Explanation

Test case 1:

2 digits in the number 12 divides the number exactly.

Test case 2:

Only 1 digit in the number 13 divides the number exactly.