

Problem T. Large Division

Time limit 1000 ms

Mem limit 65536 kB

Given two integers, **a** and **b**, you should check whether **a** is divisible by **b** or not. We know that an integer **a** is divisible by an integer **b** if and only if there exists an integer **c** such that $a = b * c$.

Input

Input starts with an integer **T** (≤ 525), denoting the number of test cases.

Each case starts with a line containing two integers **a** ($-10^{200} \leq a \leq 10^{200}$) and **b** ($|b| > 0$, **b** fits into a 32 bit signed integer). Numbers will not contain any leading zeroes.

Output

For each case, print the case number first. Then print `divisible` if **a** is divisible by **b**. Otherwise print `not divisible`.

Sample

Input	Output
6 101 101 0 67 -101 101 7678123668327637674887634 101 11010000000000000000 256 -202202202202000202202202 -101	Case 1: divisible Case 2: divisible Case 3: divisible Case 4: not divisible Case 5: divisible Case 6: divisible