Dragons

Our country is being attacked by the Enemy country. The soldiers are coming in a line. There are different kinds of soldiers. Our spy informed us that they have Dragons. He also drew a sketch how they look. Now you have to find how many Dragons they have so that we can prepare ourselves.

Input

The first line of input file contains the number of test cases T (T \leq 25). Each test case is composed of two lines, where the first line describes the line of soldiers using a string (a sequence of nonempty alphabetical character). A single character means a single soldier or a Dragon. There will be no space between two consecutive soldiers (characters). The second line contains a single character describing the Dragon. Now you have to find the number of Dragons in the line of soldiers, that is, number of occurrence of the given character in the previous string. The maximum number of soldiers will not be greater than 100. The problem is case sensitive, that means d and D are two different types of soldiers.



Output

For each case, print a line like "Case X: N", without the quotes, where X is the number of test case starting from 1 and N is the number of Dragons. Check sample input and output sections for more details.



Example

Input: 5 ssddDddssdSdsdsd D adnalkdjfkasdjkaa d aaknklopmnhlakdjsfksdakldjfalkdfla a k k huioplnouol a

Output:

Case 1: 1

Case 2: 3

Case 3: 6

Case 4: 1

Case 5: 0