Problem A. Security check

Input file: standard input
Output file: standard output

Time limit: 1 second Memory limit: 256 megabytes

One of the most important security measures at an airport is verifying the identity of passengers. The biometric passport contains much information that can be used to authenticate the identity of the passport holder such as his distinctive physical characteristics.

In this problem, a passport is identified by a string of alpha-numerical characters denoting the ID of the passport. We would like to check if a passport is authentic or not. To do so, you'll be given a key consisting of a string of alpha-numerical characters. If it's possible to generate the passport ID by concatenating sub-strings from this key then the passport is authentic and you should output 1, otherwise, the passport is not authentic and you should output 0.

Input

You will be given a number of test cases $T \leq 100$.

Following is T lines, each line is a test case containing strings A then B separated by one space denoting respectively the key and the ID of the passport. $(1 \le |A|, |B| \le 10^5$ containing only alphabetic lowercase characters)

Output

Print T lines containing either 0 or 1 as an answer for the corresponding test case.

Example

standard input	standard output
2	0
a ab	1
abcbcabc abc	