D Digital Friends

Problem

Two positive integers are called *friends* if they consist of the same decimal digits. So 123 and 32331313323213 are friends, but 123 and 22121221 are not.

Two positive integers (that are not friends) are called *almost friends* if a single neighbour exchange in one of them results in a pair of friends. A *neighbour exchange* changes two neighbouring digits a and b into $a-1$ and $b+1$, or into $a+1$ and $b-1$, provided that these new digits are still in the range $0 \ldots 9$, and that no leading zero is generated. So 123 and 2223042 are almost friends (let $04 \rightarrow 13$), and 137 and 470 are neither friends nor almost friends (note that $13 \rightarrow 04$ is not allowed).

The problem is to determine if two given integers are friends or almost friends.

Input

The first line of the input contains a single number: the number of test cases to follow. Each test case has the following format:

- One line with two integers x and y, separated by a single space, with $0 < x, y < 10^{100}$. Both integers start with a non-zero digit.

Output

For every test case in the input, the output should contain a single line with the string `"friends"` or `"almost friends"` or `"nothing"`, reflecting the property of the two given integers.

Example

The examples below correspond to the four examples mentioned in the text.

Input	Output

`4`
`123 32331313323213`
`123 22121221`
`123 2223042`
`137 470`
	`friends`
	`almost friends`
	`almost friends`
	`nothing`