

CCCHK '08 J1 - Best fish

Two friends, Casper and Natalie went fishing. They caught a lot of fish. Casper pointed out that he had the longest fish, but Natalie said she had the heaviest fish. They agreed that they would determine the best fish as being the one whose product of the weight and length was the largest.

Your job is to determine who caught the best fish.

Input Specification

The input begins with an integer C ($\leq 10\,000$) which represents the total number of fish that Casper caught. Then each of the C records follows on its own line. Each record consists of two positive integers each less than $10\,000$: the weight followed by the length of that particular fish. After these records, there is a number N ($\leq 10\,000$) which represents the total number of fish that Natalie caught.

On the next N lines, there is one record per line, as outlined above.

Output Specification

The output will be `Casper` if he has caught the best fish, or `Natalie` if she has caught the best fish, or `Tie` if they caught equally good fish.

Sample Input

```
3
10 3
3 11
4 4
4
10 2
29 1
16 2
6 6
```

Sample Output

```
Natalie
```