GFSSOC '15 Fall J1 - CodeFights

Time limit: 2.0s **Memory limit:** 16M

CodeFights, a website where you pit your debugging skills against others, has been recently popular among your friends. The trick to winning is knowing when to pick fights! Each player has a rating based on the Elo system (an integer between 1 and $3\,000$), and the higher your rating, the "better" you are. You have a rating of A, and there are N competitors lined up to fight you. If the difference between your ratings is greater than 100, you should reject their challenge. Otherwise, you should accept. Can you write a program to decide when you should program?

Input Specification

The first line of input will have one integer: A.

The second line of input will have one integer: N.

The next N lines will have one integer each, k — representing the rating of a competitor who wants to fight you.

Output Specification

For each competitor, either output `fite me! >:3` if the rating difference is less than or equal to 100, otherwise `go away! 3:<`. The answer to each competitor should be on separate lines.

Constraints

$1 \leq N \leq 500$

Sample Input

```
1500
5
1200
1100
1399
1450
1530
```

Sample Output

```
go away! 3:<
go away! 3:<
go away! 3:<
fite me! >:3
fite me! >:3
```