

## Y Guessing Game

Time limit: 1s

The jury decided to not give away the answer to this problem. Instead, you will have to guess.

For each testcase, the answer is a number between 1 and 1000, inclusive. After each guess, we will tell you whether your guess was correct, too low, or too high.

To not make this problem too difficult (it is a test session problem, after all), it has been decided that you may use at most 1000 guesses to guess the answer.

### Interaction

This is an interactive problem. Your submission will be run against an *interactor*, which reads the standard output of your submission and writes to the standard input of your submission. This interaction needs to follow a specific protocol:

Your program should make at most 1000 guesses. For each guess, your program should print an integer  $x$  ( $1 \leq x \leq 1000$ ), the number you want to guess. The interactor will respond with a single line containing one of the following three sentences:

- “That is correct!” if you guess the answer. If so, your submission should exit.
- “Your guess is too high.” if your guess is higher than the answer.
- “Your guess is too low.” if your guess is lower than the answer.

If your program did not guess the answer after 1000 guesses, it will be terminated and receive a wrong answer.

Reading more input after receiving “That is correct!” will result in a time limit exceeded and printing more output will result in a wrong answer.

Make sure you flush the buffer after each write.

A testing tool is provided to help you develop your solution.

**Read****Sample Interaction 1****Write****Read****Sample Interaction 2****Write**