

MAFIA

Problem Statement:

To bribe the Mafia, you need a lot of money. You can borrow only from one of your 300 friends (numbered 1 to 300) who have 1 to 1000000(both inclusive) bucks, so you want to borrow money from the friend with the most cash.

However, your friends are pretty annoying and only tell you whether they have greater(G), lesser(L) or equal(E) money to a given value.

You can ask a maximum 1000 questions (even less are ok) of the form 1 (friend_number) (value). And finally input the maximum amount of money you can borrow in the form 2 (max_money).

Examples:

- 1 15 3007 This question asks whether the 15th friend has more, less or equal money to 3007 bucks.
- 2 2000 This indicates that the friend with the maximum money has 2000 bucks.

Note:

- Asking more than 1000 questions will end program instantly.
- Entering invalid question or final input will end program instantly.
- Keep friend_number between 1 and 300(both inclusive) and keep value between 1 and 1000000(both inclusive).