

pm
output!). If these cards have the same value written on them, the interactor will reply with `MATCH` and eliminate the cards from the surface. Otherwise, it will reply with two integers, the first representing the value of i_1 and the second representing the value of i_2 .

If at any point in time the interactor decides you've made an invalid move, it will print `-1` and exit. You must read this value and exit right away, otherwise you might get a verdict which does not properly reflect your invalid move.

You must print `-1` after you have decided to not make any more moves.

Constraints and notes

- $1 \leq N \leq 10^3$
- You are allowed at most $2N$ moves
- You may not ask to make a move with a card that has already been removed from the surface
- The card indices **DO NOT** change after other cards are removed from the surface

Interaction	Explanation
5	The initial order for the cards is [3, 4, 3, 4, 1, 2, 5, 5, 1, 2].
1 2	
3 4	
2 4	
MATCH	
1 3	
MATCH	
9 10	
1 2	
5 9	
MATCH	
8 7	
MATCH	
10 6	
MATCH	
-1	