

Problem G. Accordion

Input file: *standard input*
Output file: *standard output*
Time limit: 1 second
Memory limit: 512 mebibytes

Jay and Bob have a bag with N cards.

What do you think the cards contain?

Each card contains a joke.

What do you think the guys are going to do?

Jay reads no less than one and no more than K cards with jokes and throws all of them away. After that Bob reads a number of cards with jokes no less than one and no more than Jay read at the previous turn and throws all of them away.

Do you know what happens after that?

Right! Jay reads a number of cards with jokes no less than one and no more than Bob read at the previous turn and throws all of them away. And so on until no cards with jokes are left.

Who is the winner?

Of course the winner is the guy who reads the last joke because “He laughs best who laughs last”.

You are to check whether the winner is Jay or Bob (in an assumption that both guys want to win and they both do as much as possible to laugh last).

Input

The input consists of two integers N and K ($1 \leq K \leq N \leq 10^5$).

Output

If the winner is Jay, output “WIN” on the first line and the number of jokes Jay must read in his first turn on the second line. If there are several possible answers, output any one of them.

In case the winner is Bob, output “FAIL”.

Examples

standard input	standard output
1 1	WIN 1
2 1	FAIL
6 3	WIN 2