Morning Problem: Vote

Description

It's election time! Naturally, the candidate with the most votes wins. Don't worry about what to do if there is a tie for having received the most votes, just report that there was a tie.

Your job is to determine who won after tallying a sequence of votes, or determine there was a tie between at least two candidates for the most votes.

Input

The input will consist of a single line. This line consists of a sequence of votes made by voters. Each vote will be a positive number at most 1000 indicating the candidate that vote was cast for. Finally, this sequence is terminated by a 0, indicating no more votes are collected.

There will always be at least one vote (i.e. at least one positive number before the terminating 0) and there will be at most 1000 votes in total.

Output

Output a single line containing the integer indicating which candidate received the most votes. If multiple candidates received the most votes, output a single line containing tie instead.

Remember to end your lines with a newline!

Sample Input 1

2 1 0

Sample Output 1

tie

Explanation: Two votes were cast, one for candidate 1 and one for candidate 2. So candidate 1 and 2 tied for the most votes.

Sample Input 2

2 0

Sample Output 2

2

Explanation: Only one vote was cast and it went to candidate 2.

Sample Input 3

3 3 1 2 3 2 1 2 3 0

Sample Output 3

3

Explanation: Candidate 1 received 2 votes, candidate 2 received 3 votes, and candidate 3 received 4 votes. So candidate 3 won.

Sample Input 4

1 2 3 4 1 2 3 0

Sample Output 4

tie

Explanation: Candidates 1, 2, and 3 all received the most votes (2 each), so there was a tie.