

Elections

SEASON 7 – SECOND ROUND



The next in turn elections are to come soon. All the fences are posterred with leaflets and the mail boxes are full of throwaways. Cheeky guys are looking at us from TV's and promise to make our life better ... And Ivancho has to write a program that would calculate the results of voting.

A candidate wins the election if **at least 50%** of the electors have voted for him and also he has received **strictly bigger** number of votes than every other candidate. If there is no such candidate, there is no winner.

Input

The first line of the file `elections.in` contains a number of candidates N and a number of electors M . Then M lines follow, each one contains a number of candidate that the elector voted for. The candidates are numbered with integers from 1 to N .

Output

In the output file `elections.out` print the number of the candidate, who wins the elections, as well as the percent of electors that voted for that candidate (to within 2 decimals). If there is no winner print "No winner" (without the quotes).

Constraints

$$1 \leq N, M \leq 100$$

$$1 \leq a_i \leq N$$

Time limit: 0.5 sec

Memory limit: 256 MB

Example test

Input (<code>elections.in</code>)	Output (<code>elections.out</code>)
2 3 1 1 2	1 66.67
3 3 1 2 3	No winner