



F: Polling

Midterm elections are here! Help your local election commission by counting votes and telling them the winner. If more than one candidate ties with the most votes, print out all of their names in alphabetical order.

Input

Each input will consist of a single test case. Note that your program may be run multiple times on different inputs. Each test case will begin with an integer n ($1 \leq n \leq 1,000$), indicating the number of votes. The next n lines will hold the votes. The candidates' names will appear one per line, and consist of between 1 and 20 capital letters only.

Output

Output the name of the candidate with the most votes. If there is a tie, output out all of the names of candidates with the most votes, one per line, in alphabetical order. Do not output any spaces, and do not output blank lines between names.

Sample Input

Sample Output

5 FRED BARNEY FRED FRED BARNEY	FRED
5 PORTHOS ATHOS ARAMIS PORTHOS ATHOS	ATHOS PORTHOS