Baking Competition

In a quaint little town nestled in the hills, the annual baking competition is a tradition that dates back to the early settlers who first founded the town. The competition is a celebration of their heritage and the love of baking that they brought with them from their homeland.

The competition has grown in popularity over the years, and people from neighboring towns also come to participate in the event. The town is abuzz with excitement, and the local bakers are busy preparing their best recipes for the competition. As the town's official judge, you have been entrusted with the responsibility of developing a program that can accurately count the votes and declare the winner. According to tradition, if there are several winners, they are all crowned consecutively according to their alphabetical list. Therefore, in this rare case, your program must list all the winners in alphabetical order.

Can you rise up to the challenge and develop a program that can handle this historic competition and crown the most deserving baker as the winner? The town is counting on you to preserve this cherished tradition and ensure that it continues to thrive for generations to come.

Input

Each input consists of one test case. The input will start with an integer n (1 <= n <= 1 000), indicating the number of votes. The next n lines will hold the votes in the form of contestants' names. The names of the contestants will appear one per line, and consist of between 1 and 20 capital letters only.

Output

Print the name of the contestant who receives the highest number of votes. In the event of a tie, list the names of all contestants with the most votes in alphabetical order, each name appearing on a separate line without any spaces or blank lines between them.

Sample Input 1	Sample Input 2
6	6
TOMAS	MARTINA
JAN	JULIA
MARCEL	PATRICIA
JAN	JULIA
JOZEF	ZUZANA
JAN	MARTINA
Sample Output 1	Sample Output 2
JAN	JULIA
	MARTINA