Problem A: Sarah and the study group

Statement:

It is exams time at Insat so Sarah decided to create a study group to help her revise but they quickly encountered a problem after creating the group. They couldn't decide which subject to study first so they took a vote where each member voted on the topic he wants to study.

Help them find out the topic they will study first.

Input:

The first line contains a single integer T ($1 \le T \le 100$) — the number of test cases. Then the test cases follow. Each test case consists of one line.

The first line of every test case contains a single integer **n** ($1 \le N \le 10^5$).

The second line contains \mathbf{n} caracters c_i, the name of the subject the i-th member voted on. (c_i is an uppercase letter between 'A' and 'Z')

Output:

For each test case, output the letter that is the name of the subject with the most votes. If there is a tie, output '#'.

Example:

Input:

3	
5	
A B C D A	
4	
АВАВ	
1	
X	

Output:

	A	
I	#	
I	x	