

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 ($1 \leq T \leq 100$) — 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 ($1 \leq n \leq 10^5$).

The second line contains n characters 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 '#'.
 For example, if the input is:

Example:

Input :

3					
5					
A	B	C	D	A	
4					
A	B	A	B		
1					
X					

Output :

A#X