Unique strings

You are given **N** strings, you have to determin how many of them are **unique**. Unique means that it apperars in the input only once.

Constraints :

N <= 100000

sum of all lengths of strings <= 2*10^6

Input

First line of input is number t, donating number of test cases. Next line consists of interger N. N lines follow each contaning one string.

Output

Output asked numbers, for each test case.

Example

Input:
1
10
aba
asdf
abbe
aba
abbe
aaaa
aaaa
abbe
aaaa
bbbb

Output:

2

Explanation, "bbbb" and "asdf" are only two strings that are unique in the input.