

Given a string 'STR' consisting of lower case English letters, the task is to find the first non-repeating character in the string and return it. If it doesn't exist, return '#'.

For example:

For the input string 'abcab', the first non-repeating character is 'c'. As depicted the character 'a' repeats at index 3 and character 'b' repeats at index 4. Hence we return the character 'c' present at index 2.

Input Format:

The first line of input contains an integer 'T' representing the number of test cases. Then the test cases follow.

The only line of each test case contains a single string 'STR' consisting of only lowercase English letters.

Output Format:

For each test case, print a single character representing the first non-repeating character in the given string.

The output for each test case is in a separate line.

Note:

You do not need to print anything; it has already been taken care of.

Constraints:

$1 \leq T \leq 100$
 $1 \leq N \leq 10^4$

Where 'T' is the number of test cases, and 'N' is the length of the string.

Time Limit: 1 sec

Sample Input 1:

2
bbabcbcb

babaabea

Sample Output 1:

a
e

Explanation Of Sample Input 1:

For the first test case,
the first non-repeating character is 'a'. As depicted the character 'b' repeats at index 1, 3, 5, 7, and character 'c' repeats at index 6. Hence we return the character 'a' present at index 2.

For the second test case,
the character 'e' is the first non-repeating character. As depicted the character 'b' repeats at index 2, 5, and character 'a' repeats at index 3, 4, and 7. Hence we return the character 'e' present at index 6.

Sample Input 2:

3
cbbd
bebeeed
abcd

Sample Output 2:

c
d
a