Day 82 coding Statement:

You are given N binary strings of length N each. You need to find a binary string of length N which is different from all of the given strings.

Note:

- A binary string is defined as a string consisting only of '0' and '1'.
- A string is considered different from another string when they have different lengths, or when they differ in at least one position.

Input Format

- The first line will contain T- the number of test cases. Then the test cases follow
- The first line of each test case contains *N* the number of strings and length of strings.
- Each of the next N lines contains a binary string of length N.

Output Format

0010

For each test case, print on one line a binary string of length N, which is different from all of the given strings. If there are multiple possible answers, print any.

Sample Input 2 3 101 110 100 4 1100 1010 1010

Sample Output