

Ms. Mary has a huge farm. She stays right next to the farm in a small house. She loves farming and used to grow and harvest the crops herself, however now she is very old and hence has hired a helper to do this for her. There are different demands for different crops and hence she used to grow a variety of crops in her farm. In order to have a higher yield she uses cross-cultivating. She grows her crops in a specific pattern such that, If X is the first crop at the start of the row, then it should also be the last crop in that row. If Y is the second crop from the start, then it should also be the second crop from the end of the row. This pattern should be true for all the crops grown. The helper has grown crops in the same manner.

Help Ms Mary check if the crops are grown properly according to the pattern by the helper. Let the crops be represented by characters.

Input:

The first line contains the number of test cases 't'

The first line of each test case gives the number of crops grown in a row 'n'

The second line of each test case contains n different crops.

Output:

For each test case, print in a single line, 'true' or 'false' based on whether the pattern is correctly followed.

Constraints:

$1 \leq t \leq 500$

$1 \leq n \leq 1000$

Sample input:

2

26

lyuhjnmioffgilgffoiuyhjmnl

27

miiqrcshpttcxzxcttphscrqiim

Sample output:

false

true