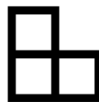


L-Covering Checker

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

In this problem, you need to implement the output checker from the previous problem.

Given a grid with n rows and m columns, where rows are numbered from 1 to n from top to bottom, and columns are numbered from 1 to m from left to right. Now, there are infinite $1 + 1$ L-shaped tiles (as shown in the figure below), and you have used some tiles to cover the grid, but you do not know if you have covered the grid correctly.



Your covering scheme can be represented as a string of length m for each of the n rows. The string contains only the six characters UDLRC., where the j -th character of the i -th row represents the covering situation of the grid in the i -th row and the j -th column. The character . represents that the cell is not covered. If there is only one . in the covering scheme, and this . is located in the 1-st row and the m -th column, then the covering scheme is correct; otherwise, it is incorrect. The character C represents the center of the tile (i.e., the bottom-left corner of the tile in the figure). The characters UDLR respectively represent that the **top, bottom, left, right** cell of this cell is covered by the center of the tile. If all L-shaped tiles are complete and each cell is covered by only one tile, then the covering scheme is correct; otherwise, it is incorrect.

Given some covering schemes, please determine if these schemes are correct.

Input

The first line contains an integer T ($1 \leq T \leq 10^4$), indicating the number of test cases.

For each test case, the first line contains two integers n, m ($2 \leq n, m \leq 500$), indicating the size of the grid.

Then, there are n lines, each containing a string of length m , where the string consists of only the six characters UDLRC.. The j -th character of the i -th line string represents the covering situation of the cell in the i -th row and the j -th column of the grid.

It is guaranteed that the sum of all $n \times m$ for all test cases does not exceed 10^6 .

Output

For each test case, if the covering scheme is correct, output **Yes**; otherwise, output **No**.

Example

standard input	standard output
2	Yes
4 4	No
CLD.	
UDCL	
DCLD	
CLRC	
2 3	
DRC	
CLU	