Transpose

Mr. Panda is designing a word search game. He has already designed an **R** x **C** grid containing one lowercase English letter at each grid cell. However, he realises that too many words appear horizontally in the grid which makes the word search too easy. Thus, he wants to transpose the grid to make the word search harder.

To transpose the grid, the first row of the original grid should become the first column of the transposed grid, the second column of the original grid should become the second column of the transposed grid and so on until the last row becomes the last column. Can you help him code a program to perform this operation?

Input
The input will contain several lines.
The first line will contain two integers, **R** and **C**, the number of rows in the grid and the number of columns in the grid respectively.
The next **R** lines will represent the grid, with each line containing a row of **C** lowercase English letters.

Output
The output should contain **C** lines with **R** lowercase English letters each, representing the grid after the transpose operation is performed.

Limits

- $1 \leq$ **R, C** ≤ 100

Sample Input (**transpose1.in**)	Sample Output (**transpose1.out**)
2 4 abcd efgh	ae bf cg dh

Notes:

1. You should develop your program in the subdirectory ex3 and use the skeleton java file provided. You should not create a new file or rename the file provided.
2. You are free to define your own helper methods and classes (or remove existing ones) if it is suitable.
3. Please be reminded that the marking scheme is:
   a. Public Test Cases (1%)
      i. 1% for passing **all** test cases, 0% otherwise
   b. Hidden Test Cases (1%)
      i. Partial scoring depending on test cases passed
   c. Manual Grading (1%)
      i. Overall Correctness (correctness of algorithm, severity of bugs)
      ii. Coding Style (meaningful comments, modularity, proper indentation, meaningful method and variable names)

Skeleton File – Transpose.java

You are given the skeleton file `Transpose.java`. You should see a non-empty file when you open the skeleton file. Otherwise, you might be in the wrong working directory.
You should see the following contents when you open the skeleton file:

```
/**
 * Name          :
 * Matric. No    :
 * PLab Acct.    :
 */

import java.util.*;

public class Transpose {
    private void run() {
        //implement your "main" method here
    }

    public static void main(String[] args) {
        Transpose newTranspose = new Transpose();
        newTranspose.run();
    }
}
```