Matrix Transpose

ZPRAC-16-17-Lab7

[40 Points]
Transpose a matrix

ANNOUNCEMENT: Up to 20% marks will be allotted for good programming practice. These include
- Comments for non trivial code
- Indentation: align your code properly
- Use of Functions

Write a program to transpose a matrix of size m x n.

Input

Two space separated integers m (number of rows) and n (number of columns)
This is followed by m rows of n space separated integers

Output

The transposed matrix(with comma separation between the numbers)

Constraints
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0 < m < 100
0 < n < 100

Example

Input:
2 3
1 2 3
4 5 6

Output:
1,4,

2,5,
3,6,

Hint :
Try to imagine the 2d matrix as a 1d array and then perform the computations.

Note :
You are not supposed to use a 2D array for this question (which will be taught at a later stage).