

Wave Print

Given a two dimensional $n*m$ array, print the array in a sine wave order. i.e. print the first column top to bottom, next column bottom to top and so on.

Note: Print the elements separated by space.

Input Format:

`n, m, array elements (separated by space)`

Sample Input

`3 4 1 2 3 4 5 6 7 8 9 10 11 12`

Sample Output

`1 5 9 10 6 2 3 7 11 12 8 4`