UCF "Practice" Local Contest — Aug 29, 2015

Snail in Matrix
Filename: snail
(*Difficulty Level:* Easy)

Given a two-dimensional matrix, your program is to print the matrix elements in a "snail-like" fashion as follows:

- print elements in the first row from left to right on an output line

- print elements in the last column from top to bottom on an output line

- print elements in the last row from right to left on an output line

- print elements in the first column from bottom to top on an output line

- print elements in the second row from left to right on an output line
  ...
  (Note that, as illustrated in Sample Input/Output, each matrix element is printed only once.)

The Input:

The input is divided into sets. Each input set starts with two integer values for M and N, dimensions of a matrix (both values between 1 and 15, inclusive, and the two values are separated by at least one space). The next M input lines contain values for matrix rows, one row per input line. Assume that each matrix element is a single character, that input values for matrix elements start in column 1, and that there is exactly one space between matrix elements in the input.
End of data is indicated by values 0 and 0 for M and N.

The Output:

For each matrix, print the original version with one space between the elements. Then, print the matrix elements in a "snail-like" fashion with no space between the elements on an output line. Leave a blank line after the output for each matrix. Follow the format illustrated in Sample Output.

Sample Input:

```
3 4
A B C D
```

```
J K L E
I H G F
5 6
A B C D E F
R S T U V G
Q Z Z Z W H
P Z Z Y X I
O N M L K J
0 0
```

Sample Output:

```
Matrix #1:
Original:
A B C D
J K L E
I H G F
Snail:
ABCD
EF
GHI
J
KL

Matrix #2:
Original:
A B C D E F
R S T U V G
Q Z Z Z W H
P Z Z Y X I
O N M L K J
Snail:
ABCDEF
GHIJ
KLMNO
PQR
STUV
WX
YZZ
Z
ZZ
```