

# Mock CCC '18 Contest 2 J2 - A Software Engineering Task

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**Time limit:** 5.0s    **Memory limit:** 1G

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You are given a 2D array with  $n$  rows and  $m$  columns and asked to run the following procedure on it 100 times.

```
function(grid):
  for each row in the grid going from top to bottom:
    for each column in the grid going from left to right:
      if the character in the given row and given column is an 'o' and the character in the
      same column and one row lower is a '.':
        swap those two characters in the grid
```

Print out the grid after running the procedure 100 times.

## Constraints

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$$1 \leq n, m \leq 50$$

In the array, the only characters that will appear are `o`, `#`, and `.`.

## Input Specification

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The first line contains two space-separated integers,  $n$  and  $m$ .

Each of the next  $n$  lines contains  $m$  characters describing the array from top to bottom.

## Output Specification

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Print the grid in exactly the same format after 100 simulations of the above procedure.

## Sample Input

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```
3 3
ooo
#..
..#
```

## Sample Output

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O . .  
# . O  
. O #