



# A. Fox And Snake

Akhtamov Azimjon, 2024299010

2024.10.4



# Problem Definition (1)

- Source: Codeforces
- Title: Fox and Snake
- Difficulty: Easy



# Problem Definition (2)

Fox Ciel starts to learn programming. The first task is drawing a fox! However, that turns out to be too hard for a beginner, so she decides to draw a snake instead.

A snake is a pattern on a  $n$  by  $m$  table. Denote  $c$ -th cell of  $r$ -th row as  $(r, c)$ . The tail of the snake is located at  $(1, 1)$ , then it's body extends to  $(1, m)$ , then goes down 2 rows to  $(3, m)$ , then goes left to  $(3, 1)$  and so on.

Your task is to draw this snake for Fox Ciel: the empty cells should be represented as dot characters ('.') and the snake cells should be filled with number signs ('#').

Consider sample tests in order to understand the snake pattern.

## Input

The only line contains two integers:  $n$  and  $m$  ( $3 \leq n, m \leq 50$ ).

$n$  is an **odd** number.

## Output

Output  $n$  lines. Each line should contain a string consisting of  $m$  characters. Do not output spaces.



# Problem Definition (3)

## Examples

input
3 3
output
### ..# ###

input
3 4
output
#### ...# ####

## Input

9 9

## Output

```
#####  
.....#  
#####  
#.....  
#####  
.....#  
#####  
#.....  
#####
```

# Solution (1)

```
2
3 i = 0
4 for _ in range(m):
5
6     if i==m-1:
7         i+=1
8         print(n*'#')
9
10    elif i%2 == 1:
11        i+=1
12        print(i) # print((n-1)*'.' + '#')
13    elif i%2 ==0:
14        i+=1
15        # print('#' + (n-1)*'.')
16        print(n*'#')
17
```

TERMINAL   PROBLEMS   DEBUG CONSOLE   OUTPUT   PORTS

```
10.py
5 5
#####
2
#####
4
#####
```



Firstly, I created 'snake'  
lines(body):

for -> to get m lines

if -> to get odd rows(1,3,5,7...)

1. if our row's number is **odd**,

**print '#' n times**

2. Else if (row's number) is **even**

**print 'i' to check**

**Conclusion:**

All **even numbers** for 'i' is we have to  
fix like that:

.....#

#.....

## Solution (2)

When the  $i$  values are even numbers,  
we have change these numbers to

.....#  
#.....

```
elif i%2 == 1:  
    i+=1  
    print(i) #We should fix here
```

### TERMINAL

10.py

5 5

#####

2

#####

4

#####

# Solution (3)

```
2 > A_510.py > ...
1 print('First number should be odd number (TOQ SON):')
2 m, n = map(int, input().split()) # Inputing numbers for m & n
3 # ____ m<= 50 ____ n >= 3 * n is odd number* ____
4
5 i = 0 #we have to calculate loop for each row
6 for _ in range(m): # m = Rows (line numbers)
7
8     if i%2 == 1: # if i is odd, we put 2nd if operators
9         i+=1 # we increase i tto 1 each time
10        if i%2 == 0 and i%4 == 0: # checking for i%4 = 0
11            print('#' + (n-1)*'.') # print #....(n times)
12        else:
13            print('.'*(n-1) + '#') #print n(times)....#
14    elif i%2 ==0: #it is our odd lines, but even i (0,2,4,...)
15        i+=1 #increasing by 1 when every loop works
16        print(n*'#') # print ##### (n times)
```



# What you have learned

- How to use **IF** operator inside the **IF** operator
- How to make **IMPLEMENTATION** with **FOR & IF**





# Questions and Answers

Greetings