No#1

Write a program that finds the sum of the following series up to given integer N.

$9 + 99 + 999 + 9999 + 99999 + 999999 \ldots\ldots\ldots + N$

Sample Input: 1500
Sample Output: 1107

No#2

Consider the following algorithm:

1. input n
2. print n
3. if $n = 1$ then STOP
4. if n is odd then $n \longleftarrow 3n + 1$
5. else $n \longleftarrow n/2$
6. GOTO 2

Given the input 22, the following sequence of numbers will be printed

22 11 34 17 52 26 13 40 20 10 5 16 8 4 2 1

No#3

Write a Java program to display the following pattern for a given row and column input.

```
#   *   *   *   #
#   #   *   #   #
#   *   #   *   #
#   *   *   *   #
#   *   *   *   #
```