RECURSION – "AT@ COUNTER"

Lab Description : The constructor will randomly load @s and –s into the matrix. Take a provided row and col location and count how many @ signs connect to the original location. @ signs are connected if they are connected up, down, left, and right of one another. You must use a matrix.

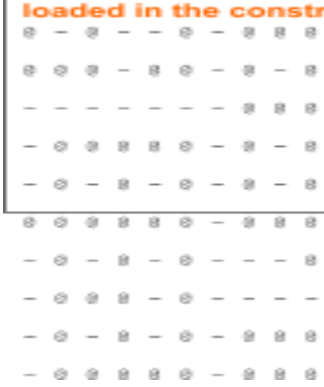
Sample Data :

```
0 0
2 5
5 0
9 9
3 9
```

Files Needed ::

AtCounter.java
AtCounterRunner.java

Assume this was randomly loaded in the constructor :



Sample Output :

```
0 0 has 5 @s connected.

2 5 has 0 @s connected.

5 0 has 29 @s connected.

9 9 has 6 @s connected.

3 9 has 16 @s connected.
```

algorithm help

```
if ( r and c are in bounds and current spot is a @ )
   mark spot as visited
   bump up current count by one
   4 recursive calls up down left right
```

If checking 0 0, you would find 5 @s are connected.

```
@ – @ – – @ – @ @ @
@ @ @ – @ @ – @ – @
– – – – – – – @ @ @
– @ @ @ @ @ – @ – @
– @ – @ – @ – @ – @
@ @ @ @ @ @ – @ @ @
– @ – @ – @ – – – @
– @ @ @ – @ – – – –
– @ – @ – @ – @ @ @
– @ @ @ @ @ – @ @ @
```