Computer Science II	Lab 09B – CELL COUNTER	Lab Value - 100

Lab Goal : This lab was designed to teach you more about recursion.

Lab Description : Take a provided row and column location and count how many @ signs connect to the provided location. Cells are connected if they are @s and up, down, left, and right of one another.

Sample Data :

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

Files Needed ::

AtCounter.java
Lab09b.java

Initial Matrix (load this in the constructor) :

```
10 x 10
@ - @ - - @ - @ @ @
@ @ @ - @ @ - @ - @
- - - - - - - @ @ @
- @ @ @ @ @ - @ - @
- @ - @ - @ - @ - @
@ @ @ @ @ @ - @ @ @
- @ - @ - @ - - - @
- @ @ @ - @ - - - -
- @ - @ - @ - @ @ @
- @ @ @ @ @ - @ @ @
```

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.

```
@ - @ - - @ - @ @ @
@ @ @ - @ @ - @ - @
- - - - - - - @ @ @
- @ @ @ @ @ - @ - @
- @ - @ - @ - @ - @
@ @ @ @ @ @ - @ @ @
- @ - @ - @ - - - @
- @ @ @ - @ - - - -
- @ - @ - @ - @ @ @
- @ @ @ @ @ - @ @ @
```