**2) First 12 pops - Stack:**

1) 6, 4

2) 6, 3

3) 6, 5

4) 6, 6

5) 7, 5

6) 8, 5

7) 8, 6

8) 8, 7

9) 8, 8

10) 7, 8

11) 5, 4

12) 4, 4

**4) First 12 pops – Queue:**

1) 6, 4

2) 5, 4

3) 6, 5

4) 6, 3

5) 4, 4

6) 7, 5

7) 6, 6

8) 3, 4

9) 4, 5

10) 8, 5

11) 2, 4

12) 4, 6

The stack code tries a path until it can’t keep advancing, then returns to the latest intersection and tries the following available path.

The queue starts checking all the spots near the origin, doing a sort of spiral shape. It checks multiple paths simultaneously.

Since stack is LIFO, as it adds cells it removes them in the same order, but the queue is FIFO, popping as inserted. Stack will go path by path, queue will go cell by cell