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Homework #2

Question 2.

First 12 coordinates popped in stack: (3,4), (3,3), (3,5), (2,5), (1,5), (1,6), (1,7), (1,8), (2,8), (3,6), (4,4), (5,4)

Question 4.

First 12 coordinates popped in queue: (3,4), (4,4), (3,5), (3,3), (5,4), (3,6), (2,5), (6,4), (5,5), (1,5), (7,4), (5,6)

The stack implementation uses uses a depth first search method while the queue implementation uses a breath first search method. The stack will always pop the most recently added coordinates. A queue will pop the oldest added value as it pops and pushes from different ends. This means that a stack will visit cells in one direction until it researches a dead end. However, the queue will check all the surrounding positions, seemingly acting like a circular radar.