Homework 2

2. The first 12 (r,c) coordinates that are popped off the stack are: (4,3), (3,3), (5,3), (5,2), (5,1), (6,1), (7,1), (8,1), (8,2), (6,3), (4,4), (4,5).

4. The first 12 (r,c) coordinates that are popped off the queue are: (4,4), (5,3), (3,3), (4,5), (6,3), (5,2), (4,6), (5,5), (5,1), (4,7), (6,5), (6,1). They are difference because the queue pops from the front of the queue, which was the earliest entered object; while the stack pops from the top of the stack, which is the latest entered object. Because of that, the coordinates that are “popped” to visit are coming from different ends, resulting in a different order of visited coordinates.