Problem 2

The first 12 (r,c) popped off the stack:

(6,4) (6,3) (6,5) (7,5) (8,5)

(8,6) (8,7) (8,8) (7,8) (6,6)

(5,4) (4,4)

Problem 4

The first 12 (r,c) popped off the queue:  
(6,4) (5,4) (6,5) (6,3) (4,4)

(6,6) (7,5) (3,4) (4,5) (8,5)

(2,4) (4,6)

The reason we get different result is that the nature of these two ADT is different. The stack is last one in first one out principle while the queue is first one in first one out principle. So the stack would pop off the most recent node added to the stack while the queue would pop off the oldest node in the queue. Therefore, different working mechanism leads to different output.