2.The First 12 (r,c) coordinates popped off by the stack in the mazestack algorithm are as follows:

1. (6,4)
2. (6,3)
3. (6,5)
4. (7,5)
5. (8,5)
6. (8,6)
7. (8,7)
8. (8,8)
9. (7,8)
10. (6,6)
11. (5,4)
12. (4,4)

4.The First 12 (r,c) coordinates popped off by the queue in the mazequeue algorithm are as follows:

1. (6,4)
2. (5,4)
3. (6,5)
4. (6,3)
5. (4,4)
6. (6,6)
7. (7,5)
8. (3,4)
9. (4,5)
10. (8,5)
11. (2,4)
12. (4,6)

The difference is because of the fundamental compile sequences of stack and queue.

For stack, it has a “last in first out” policy, so when we pop off an item, the last-added one will be the first one to be popped, so we are popping off item from the sequence in reverse to the adding sequence, so we are doing in W, S, E, N.

However, for queue, it has a “first in first out” policy, so when we pop off an item, the first-added one will be the first one to be popped, so we are popping off item in the sequence same as the adding sequence, so we are doing in N, E, S, W.