**Homework 2**

Problem 2]

First 12 popped –

[4,6] , [3,6] , [5,6] , [5,7] , [5,8] , [6,8] , [7,8] , [8,8] , [8,7] , [6,6] , [4,5] , [4,4]

Problem 4]

First 12 popped –   
[4,6] , [4,5] , [5,6] , [3,6] , [4,4] , [6,6] , [5,7] , [4,3] , [5,4] , [5,8] , [4,2] , [6,4]

In stacks we are only concerned about the last pushed element, so it is possible to pop all the elements in a row or column at once. In other words, it can continue to pop in one direction until it hits a dead end (“depth-first” search). In case of queues, we are popping the oldest pushed item so if we ever have more than two paths, we will not go “deep” in a particular order successively. We are popping the elements closer to the starting position before the the farther ones (“breadth-first” search).