CS 32 Homework 2

1. The first 12 coordinates popped off the stack by the algorithm are:
   1. (6, 4)
   2. (5, 4)
   3. (6, 5)
   4. (6, 3)
   5. (6, 6)
   6. (7, 5)
   7. (8, 5)
   8. (8, 6)
   9. (8, 7)
   10. (8, 8)
   11. (7, 8)
   12. (4, 4)
2. The stack algorithm uses depth-first search to traverse the maze. A new coordinate gets pushed onto the top of the stack, and that coordinate gets visited first when pop() and top() are called. This is a last in, first out method. The queue algorithm, by contrast, uses breadth-first search to traverse the maze. A new coordinate gets pushed to the end of the queue, and the oldest coordinate still in the queue, which is at the front, will get visited first when pop() and front() are called. This is a first in, first out method.  
   The first 12 coordinates popped from the queue by the algorithm are:
   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)