

# Code Challenges

## 1. The Amazing Race

### a. Problem:

- You will be provided with a series .txt files that are comprised of 0's and 1's.
- The provided files will represent mazes that will need solving.
- 1's are considered "the paths" and 0's are the "non-paths" (i.e. walls, out-of-bounds, etc...)

### b. Assumptions:

- There will only ever be one entrance, and one exit on each maze.
- There will only ever be a single "1" on the first line of the file, this is the maze entrance
- There will only ever be a single "1" on the last line of the file, this is the maze exit
- There will only ever be one "complete path" through the maze
- You can only move left, right, up, or down.

### c. Expectations:

- The program should print out the "steps" that should be followed to make it through the maze. As an example: "(1,4) (2,4) (3,4) (4,3) (5,3), (6,3)"
- The output should be the direct patch through the maze (i.e no back-tracking)
- The solution should be a .NET v3.1 console application
- The solution should be posted to an accessible git repo

### d. Bonus points:

- Use recursion as a part of your algorithm
- Include meaningful unit test coverage for your algorithm.

### e. Example maze:

