

Reid2.py Algorithm:

1. Initialization
 - A. Set height and width based on variables stored
 - B. Create cell_start dictionary based on the height and width chosen
2. Randomize the location of five ships "S" using a set to avoid duplicate locations
3. Creates the initial cell based on the cell_start dictionary replacing all non-ship values with a "."
4. Actual game play loop begins, using the above initialized values
 - A. A count is made of the number of ships "S", misses "O", and hits "X"
 - B. A complete grid is printed with current data
 - C. A status report is given based on the count information
 - D. If ships still exist, the user is asked for their guess location for X and Y coordinates
 - If the guess is not an integer an error is raised
 - If the guess is not in a valid play location an error is raised
 - E. If a valid location has been given, the grid is updated based on if the location matches an object on the board
 - Hits are marked with an "X" and a message is given
 - If the location has already been guessed a message is given
 - Misses are marked with an "O" and a message is given
 - F. Loop continues until there are zero ships remaining
5. Game over message is displayed as well as a total of the number of tries taken