Write Up

Unfinished Business:

   I did not have time to implement the goHome() function. Seeing as how the agent kept a record of the map and that this is only called once the entire map has been recorded it would simply consist of getting to the bottom row by any means necessary then all the way left.

   I decided that shooting the Wumpus would be counterproductive seeing as how killing the Wumpus gives you no points and the odds of a Wumpus being in the same spot as gold are very rare (.05 * odds of random square picked for Wumpus also has gold). Although the means for doing this were partly implemented.

   Lastly there was no encouragement to enter a square with a Supmu. I'm not really sure how to implement this with my current agent design.

General Concepts:

   I was striving for an agent that only kept up with what it knew about the map and its last move and then given a preference towards a direction would move. These preferences are denoted by the vpref (for up and down) and hpref (left and right) variables and are changed both permantly (when and edge of the world is reached) and temporarily (when back tracking). The given implementation should not kill itself or wander off the end of the world but will some what easily find itself in cycles. Since the goHome() function was not implemented the agent will make 2*size^2 moves. This can be adjusted at line 145 of Wumplus_World.c.

On Maps:

   The map father.wump.m was the primary one I used for testing, and mother.wump.m is an example of a unsolvable map.