Anthony Goh

1.3:

First of all, the agent has to know the objective of the game, in other words, it has to be able to know that there is a piece of gold behind the wall in the first place. In terms of other perception capabilities, it has to be able to detect the wall surrounding the gold. If it encounters the wall in front of it and knows the gold is on the other side, it could use a "tracing" algorithm to trace around the wall until it can find a straight line with no obstacles to its goal.

On the other hand, if the agent knows that there is a piece of gold, but doesn't know where it is; the agent could instead move randomly until it "sees" the gold within a certain range of sight. It should still be blocked by the wall and should not be able to see the gold through said wall. In this case, the agent will only use the tracing algorithm when it knows the target is on the other side of the wall it cannot pass through.