To RUN CODE:
1. Delete all the .class files using rm *.class
2. To compile use javac WorldApplication.java
3. Run using java WorldApplication -a false -n false -t 10000

REASON FOR NOT TAKING RISK:
I have taken 0 risks since the score varies a lot on taking risk. And since there is not planning allowed for model based agent the score of -1000 after taking a risk is not worth it. Since getting +1000 is not sure even after taking a risk.

LOGIC USED:

Since there are a lot of if-else conditions, I have written comments in every function that I implemented.

The base condition is if the percept gives true for glitter then grab it.

If there no percept is felt then I have marked all the adjacent squares as safe to visit. If a breeze is felt then all the possible places where the pit is are marked as having a pit. The updatePitInfo() function later updates the position of the pit if we do not feel the breeze from a different square. This ensures that we can visit all the places safely without scoring -1000. If the breeze is felt at some point I have used a counter called reverse. To help

the agent trace back the path and visit other unvisited places.

If the percept is stench then I mark all the possible positions of the wumpus for the first time since there can only be one wumpus and then I update the wumpus info with the updateWumpusInfo() function so that we can eliminate the possibility of the wumpus being in some square when we visit other squares. The first time I get the stench I take a turn in the correct direction if I am facing a wall. Else I shoot the arrow and mark the next square as safe. If I hear a scream I mark possible positions of the wumpus as safe. If I have no arrows then the wumpus is treated like a pit.

To explore all the possible square without planning I use a 2D array called as visited.

I keep checking if there are no safe places to visit. If there is no safe place then I perform NO-OP.