Intelligent Agent Code Worksheet

This exercise is based on a simple Python implementation of an agent navigating a grid world. Your task is to analyze the code and identify the key components of an intelligent agent as introduced in the lecture.

For each question below, refer to the code and write your answers using specific line numbers or code snippets.

1. What are the agent's abilities? (i.e., what actions can it perform?)

2. What are the stimuli/percepts in this agent's environment?

3. Where is the agent's goal defined, and how does the agent recognize it has been achieved?

4. What prior knowledge does the agent have when it starts?

5. How does the agent update its belief state or memory?

6. Which part of the code defines the environment in which the agent acts?

7. How does the agent handle uncertainty or limited information (if at all)?

8. What would you change to make the agent more intelligent?

9. Optional: Can you sketch or describe the architecture of this agent in terms of controller, body, percepts, and commands?

Work in pairs or small groups if possible.