**Week 2. Rational Agents**

1. **Consider the Python files for this week**

**setup.py** Causes changing the working directory to the location of the files. Must be different each week in order to keep the files organized.

**utils.py** Imports the standard packages and defines some auxiliary functions

def\_agents.py defines the agents, the environment and the agent functions implementing the perceptions and the actions. Each week the definitions will change to **def\_*<name>*y** where ***<name>*** is specific to the week

**test\_agents.py** specifies test functions which check the code of the Python functions defined earlier, like **test\_Agent()** without actually executing them. You can run them one by one to check the code which is different each week. Note the use of the operation assert in the code – it suspends the execution of the corresponding Python operation while running the code, which otherwise would execute.

**run\_agents.py** specifies the actual functions which execute the agents, without actually executing them. You can execute them by invoking the corresponding **run\_*<name>*.py** functions in the file, which will be different each week. This file is similar to **test\_agents.py** but the **assert** commands are removed so that the code they protect actually runs.

1. Look into the filew and try to identify ad understand

* Which agent has been implemented
* Which actions and perceptions and how are they represented in the programs
* Where the environment changes and what causes the change
* How do we measure the performance

1. Add **print()** operations to the code so that you can trace the execution of the agents and log the information from the environment. You may wish to do this by modifying the **test\_agents.py** file first but do no forget to change **run\_agents.py** as well.
2. You may wish to revisit the file to use different data structures for representing the perceptions and the actions
3. (Homework) Implement some additional types of agents or create your own agents for different tasks.