NAME:
COLLABORATOR(S): *You are not allowed to have any collaborators.*

CS480 – Project Phase 1
Assigned on: Sunday, 10/19/2014
Due: Sunday, 10/26/2014, 11:59pm
Please submit your solutions through black board assignment page.

In this phase, you are provide a product's $*value,* $*price*, and the probability that the product is in Good condition. Given a product's $*value*, $*price*, and probability of being Good, you are asked to decide whether you want to buy the product or not. You need to implement a method whose arguments are value, price, and probability and it needs to return True if your agent wants to buy the product, or False otherwise. You are provided two files.

- agents.py
    - This file has the base agent Agent and a few example agents.
- simulate_agents_phase1.py
    - This file simulates a market where agents are presented products.

Your task is to create an agent called Agent_<hawk_username> where <hawk_username> is, well, your Hawk username. Specifically:

1. Create an agent_<hawk_username>.py file.
2. In that file, define an Agent_<hawk_username> class, which inherits the base Agent class.
3. Implement the will_buy method. See the agents.py file for example agents.
4. Your agent should not override the constructor (__init__ method). We'll run your code with the default constructor of the Agent class.
5. In the simulate_agents_phase1.py file, add your agent to the list of other agents.
6. Run the simulation and compare your agent's performance to the performance of other agents.

Submit two (and only two) files:

1. agent_<hawk_username>.py file.
2. A short report in .txt format. The report should have:
    a. A brief description of the will_buy strategy.
    b. The simulation results comparing your agent to the other agents. (This is the output from the simulate_agents_phas1.py file after you add your agent to the list.) Ideally, your agent should outperform the other agents in all three cases (a fair market, a junk yard market, and a fancy market. See the simulate_agents_phase1.py file for more details.)