

Problem Set VII: Pac Man Project with Reinforcement Learning

Aim The purpose of this workshop is to help you get a better understanding of reinforcement learning and how to work with Q functions.

<http://ai.berkeley.edu/reinforcement.html>

Your Task Your task is to pick up from where you left of last week, and to complete the *fourth* question of Project 3 at <http://ai.berkeley.edu/reinforcement.html#Q4>. You should already have all the necessary files to complete this task.

Hints In order to help you complete the task during the workshop, here are some useful hints:

1. The functions that you need to change:
 - (a) `computeValueFromQValues`
 - (b) `getQValue`
 - (c) `computeActionFromQValues`.
2. The files you need to take a look:
 - (a) `util.py` (`Counter()`)
 - (b) `featureExtractors.py`
3. How to test your code:
 - (a) `python gridworld.py -a q -k 5 -m` (to get your agent to learn via keyboard input)
 - (b) `python autograder.py -q q4` (testing by autograde)