

## Project 2

This small project is built based on the programming assessment 3. I utilized code for Gridworld, Grid, QLearningAgent class in this assessment and their dependent files. I created a SarsaAgent class which is similar to the QLearningAgent expect the update function. The main parameters I used are:  $\alpha = 0.5$ ,  $\epsilon = 0.1$ , discount = 1.0, episodes = 500.

I also created a run.py file to implement two algorithms and draw the graph. By get smoothed data with small variance, I got 40 values for each episode and calculated the mean of each episode. Then I smoothed the mean values of the 500 episodes by averaging the reward sums from 10 successive episodes and used the smoothed data to draw the graph.

