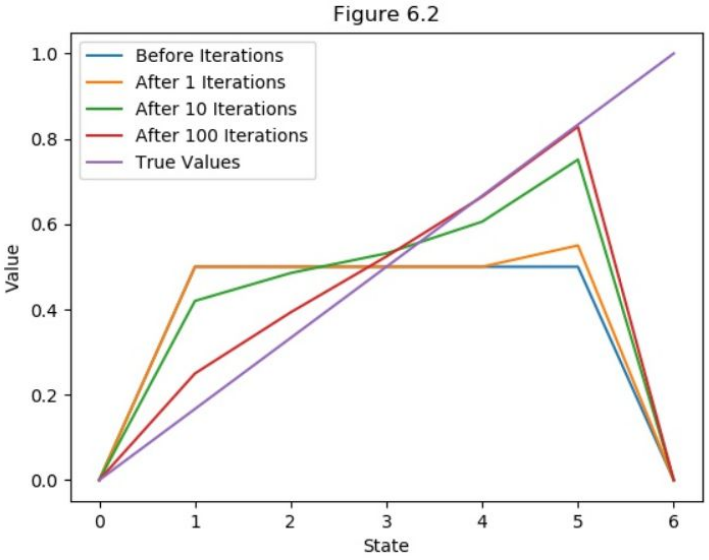
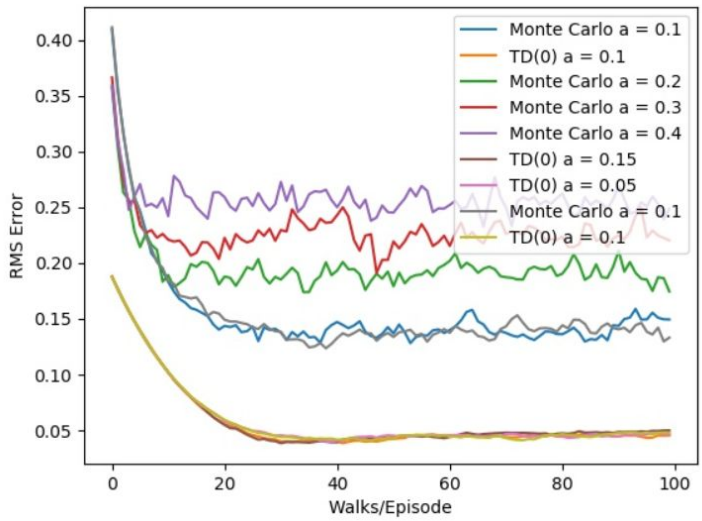
Assignment - 3
Abhishek Maiti

Question 6

Estimation of the given policy



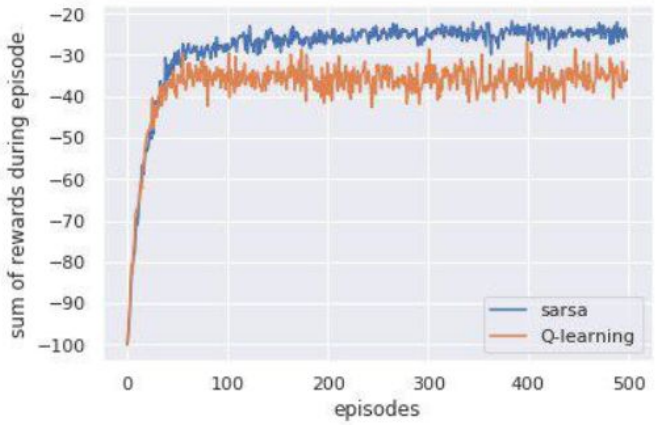


Ignore 0 and the 6th state. These are the terminal states.

TD(0) is performing better than Monte-Carlo for this particular task.

The top graph is Value Iteration for the different states, and the bottom is the error in estimation

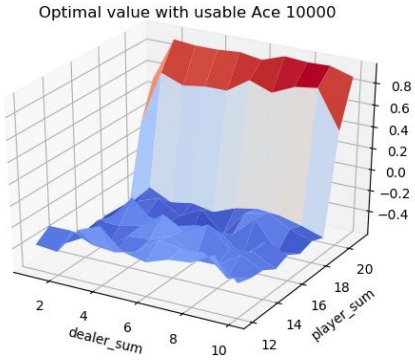
Question 7

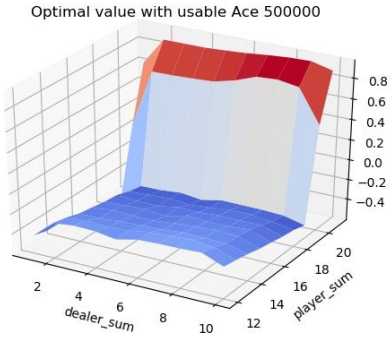


Q-Learning Vs Sarsa

We can see that Sarsa is performing worse than Q-learning.

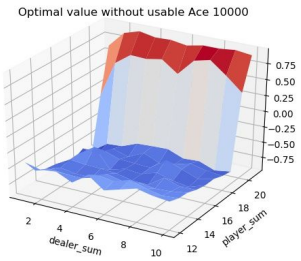
Question 4

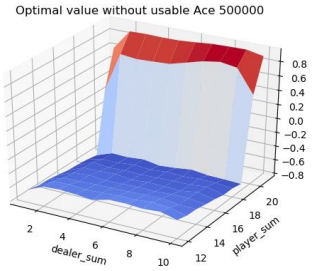


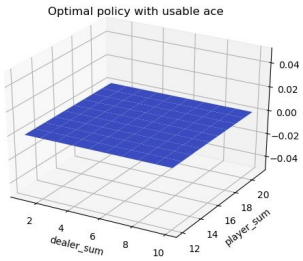


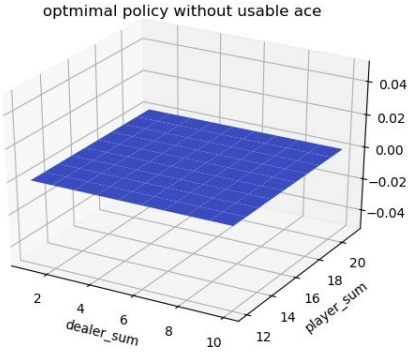
Optimal Values for 10000 and 500000 trials (with usable ace)

For without usable ace, turn to next page.

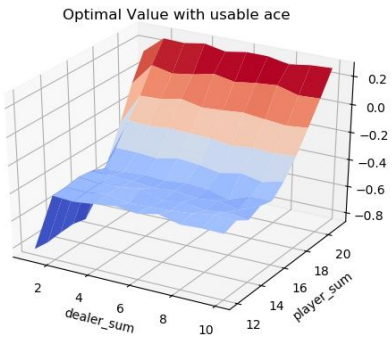


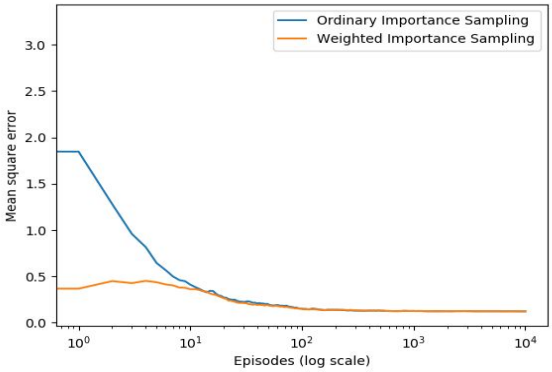






Best Policy for given rewards. (Above Figures) and Value function below right





Weighted importance sampling produces lower error estimates of the value of a single blackjack state from off - policy episodes. (above right)