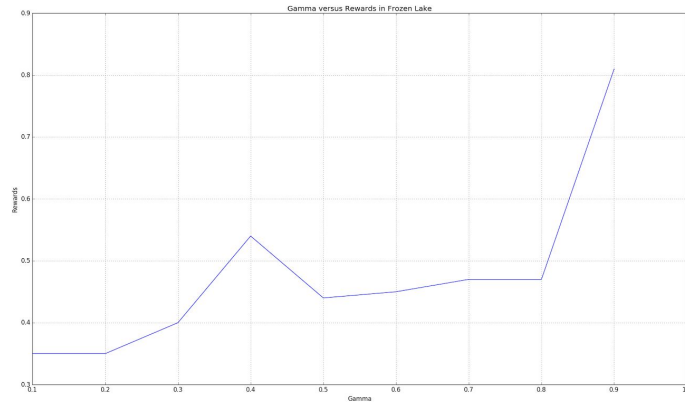
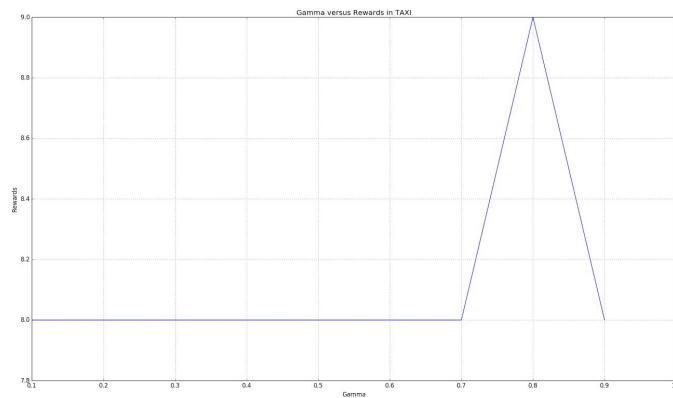


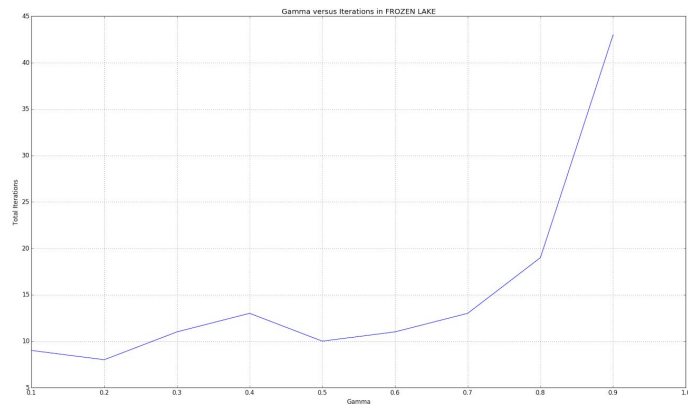
Reinforcement Learning
Programming Assignment 1
Shivam Goel
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The Graph shows the Gamma values versus the Rewards obtained in the Frozen Lake. It clearly shows that the Rewards are increased and reach a maximum value as we increase the value of Gamma from 0.1-0.9 with step of 0.1. The Rewards obtained are the average rewards per 100 iterations of the Game after the evaluation of the optimum policy.

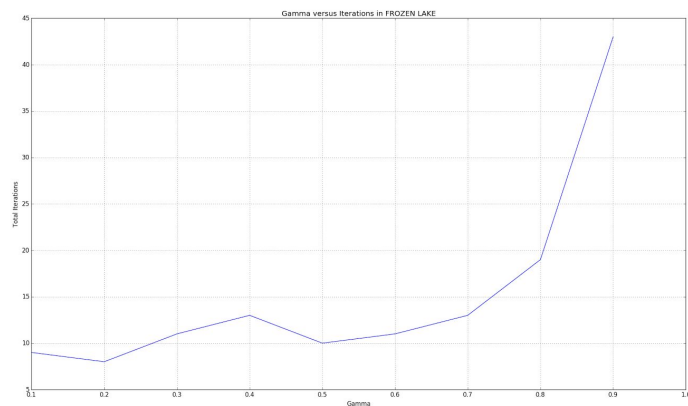


The Graph shows the Gamma values versus the Rewards obtained in the TAXI(Deterministic). It clearly shows that the Rewards are increased and reach a maximum value as we increase the value of Gamma from 0.1-0.9 with step of 0.1. But they start to decrease after 0.8.



The Graph shows the Gamma values versus the number of iterations the to obtain an optimal policy obtained in the Frozen Lake.

It shows that the number of iterations it takes to converge increases as we increase Gamma and hence to increase rewards we need more number of iterations to converge.



The Graph shows the Gamma values versus the number of iterations the to obtain an optimal policy obtained in the TAXI.

It shows that the number of iterations it takes to converge increases as we increase Gamma and hence to increase rewards we need more number of iterations to converge.