Name: Kelvin Lu
Netid: klu21
G number: G01194210

Mean Reward Reached : 7.94 (DDQN)

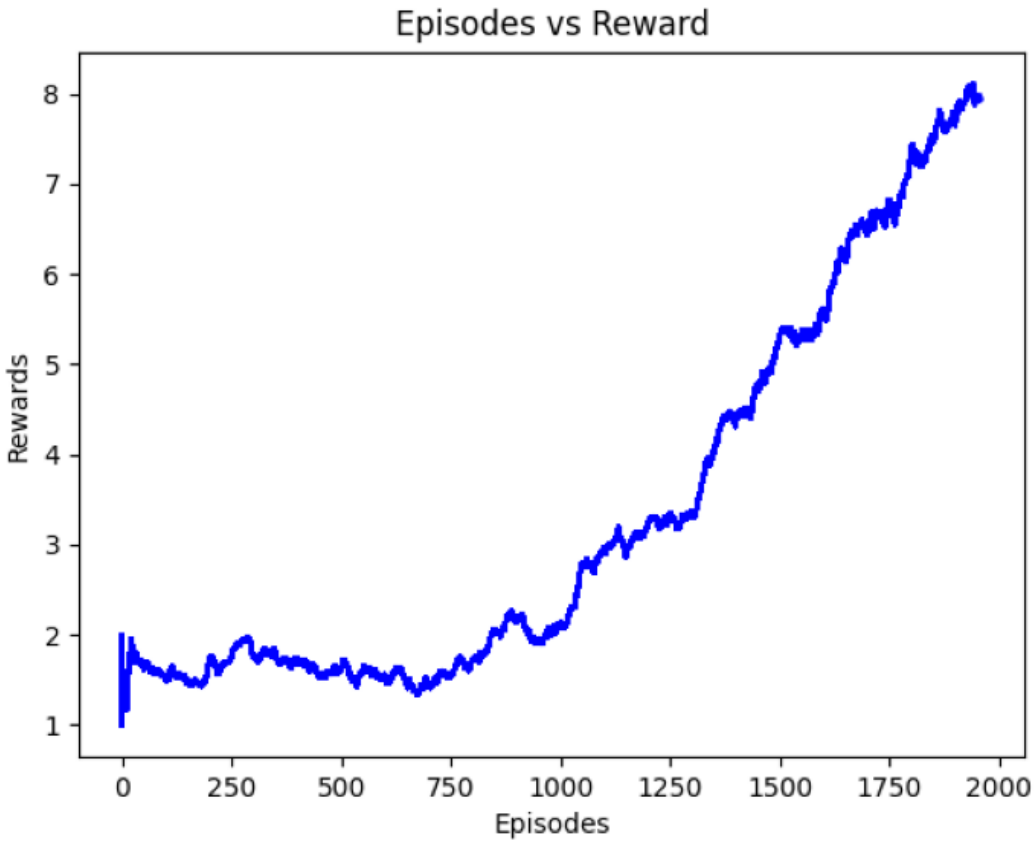
Uploaded Saved DQN/DDQN Model on BlackBoard: (Yes if you uploaded, No if not)

Uploaded your Agent.py and/or Agent_double.py file on Blackboard : Yes

Plot of Mean Evaluation Reward for the model that reaches the target score (Either DQN or DDQN): (Add Here)

DQN -

DDQN



Provide a few sentences to analyze the training process and talk about some implementation details:

During the early phases of the training cycle, the neural network has to explore all possible combinations with respect to moves. This phase is around 550 epochs and is stored in ReplayMemory. Once enough moves were explored, the training aspect of reinforcement learning began. For each epoch, the evaluation increases fairly quickly. The training cycle was ended manually when a reasonable score was converged with a relatively low epsilon.

Extra Credit (Answer the questions accordingly if you did the corresponding part. The questions are just prompt. You should elaborate a bit more if you can.):

1. How did you reach a mean score of 11? What changes have you made?
    a. No changes were made. The default hyperparameters were used.