

REPORT OF IMPLEMENTATION

The implementation begins in step 4. It's Your Turn.

1- Was created the QNetwork class that build the deep neural network with three fully connected layers, receiving the state as input and actions as output.
The neural network was created using PyTorch.

2- Was created the Agent class.

Looking for learning and improving the results, the agente implements the Experience Replay and Fixed Q-Targets methods.

3- Was created the ReplayBuffer class to implement the Experience Replay method

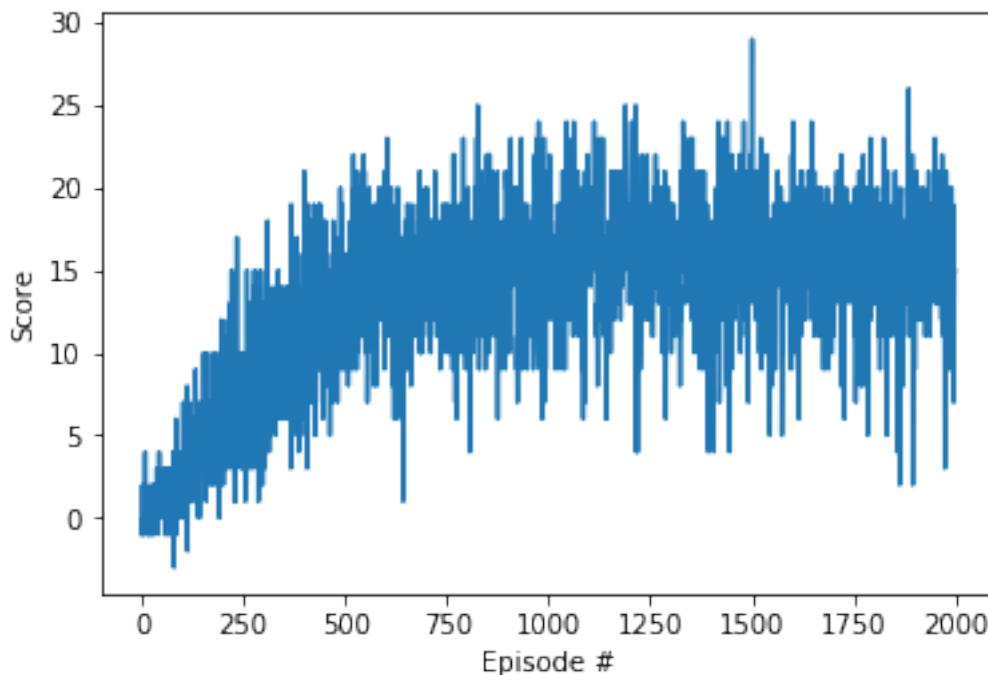
4- Training the agent

The agent was trained in 2.000 episodes and epsilon decay = 0.995

The environment is considered solved when the agent achieve the mean score ≥ 13.0 , but the train continues until finish the 2.000 episodes.

5- RESULTS:

- The agente achieve score 13.01 in episode 535
- The biggest average score was 16.26 in episode 1.500



- Running the agent after the training it achieve score = 16.0

6- Future ideas for improving agent's performance

Looking for improving the agent's performance we suggest that be implemented the method Prioritized Experience Replay.