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[Unit 5 Reinforcement Learning](#) (2

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8. Deep Q-network

Extension Note: Project 5 due date has been extended by 1 **more** day to **September 6 23:59UTC** .

As you have observed in the previous tab, a linear model is not able to correctly approximate the Q-function for our simple task.

In this section, you will approximate $Q(s, c)$ with a neural network. You will be provided with a DQN that takes the state representation (bag-of-words) and outputs the predicted Q values for the different "actions" and "objects".

Deep Q network

1/1 point (graded)

Complete the function `deep_q_learning` that updates the model weights, given the transition date $(s, c, R(s, c), s')$.

Please enter the *average episodic rewards* of your Q-learning algorithm when it converges.

✓ Answer: 0.50

Submit

You have used 2 of 6 attempts

i Answers are displayed within the problem

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Topic: Unit 5 Reinforcement Learning (2 weeks) :Project 5: Text-Based Game / 8. Deep Q-network

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💬 [anyone interested in future collaboration?](#)

[Hi, I enjoyed this course and the discussions have been helpful for me time to time. I am interested in pursuing further by working on some real l...](#)

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💬 [A more complex adventure](#)

[Would you like to introduce your reinforcement learning code to a more interesting quest? I'm working on \[a project\]\[1\] that will implement a re...](#)

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? [Policy about posting the projects solutions code online](#)

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💬 [\[Staff\] Capstone Exam Practice](#)

[I have so many questions regarding the Capstone exam and I can't find the answers even going to MIT's SDS website. Could any staff member el...](#)

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🗨️ [- The End -](#)

[By reaching here, we completed all units and projects. Any thoughts?](#)

43 new_ 47

👤 [Community TA](#)

🗨️ [\[Staff\] Deep Q network](#)

[What values for *average episodic rewards* should be used? I tried one given by "Avg reward:" from the last line of `agent_dqn.py` output and f...](#)

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👤 [Community TA](#)

🗨️ [Thank you all !!!](#)

[Just wanted to express my gratitude to all my fellow learners and the amazing staff and professors. Thank you for this amazing journey, I learned...](#)

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🗨️ [CMU 11-785 Introduction to Deep Learning has just started](#)

[If anyone wants to continue learning about deep learning, CMU's \[11-785 Introduction to Deep Learning\]\[1\] has just started this week, and the au...](#)

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🗨️ [\[Staff\] Deep Q-network](#)

[Now that the deadline has passed, could you please provide us with the code for the last question \(Deep Q-network\). It would really help. Thanks!](#)

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? [Suggestion for 14.310x/Fx](#)

[Hi, 14.310x/Fx is the only one that I have never attempted. I passed other 3 courses \(6.431x, 18.6501x and 6.86x\) for this SDS MicroMasters and t...](#)

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[Anyone consider either Harvard, UT Texas or Georgia Tech?](#)

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☑️ [deep q learning and What to do with alpha?](#)

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