edX

Actor Critic
Exercise 7.3: Actor Critic

In this exercise, you will implement an actor critic algorithm.

Make sure that you have completed the setup requirements as described in the Set Up Lab Environments section.

Now, run jupyter notebook and open the "Ex7.3 Actor Critic.ipynb" notebook.

Examine the notebook. We have given you boiler plate and helper code for the implementation of an actor critic with n-step update algorithm. Basically, the Baselined REINFORCE algorithm is implemented and you need to write the function to compute the n-step target.
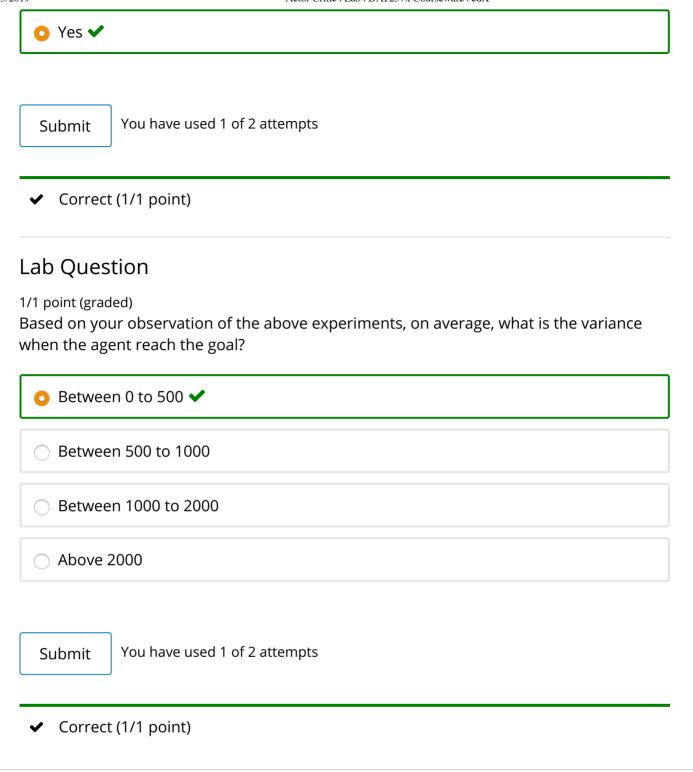
Once you got yourself acquainted with the notebook, go to #TODO. Here you need to create a function that returns an array of n-step targets, one for each timestep.

Once you implemented the n-step target function, run this notebook several times and use max_number_of_episodes = 500.

Lab Question

1/1 point (graded)
Based on your observation of the above experiments, on average, does the agent manage to reach the goal within 500 episodes?

○ No

⦿ Yes ✔

Submit   You have used 1 of 2 attempts

✔ Correct (1/1 point)

Lab Question

1/1 point (graded)
Based on your observation of the above experiments, on average, what is the variance when the agent reach the goal?

⦿ Between 0 to 500 ✔

○ Between 500 to 1000

○ Between 1000 to 2000

○ Above 2000

Submit   You have used 1 of 2 attempts

✔ Correct (1/1 point)