

## hw4\_mdps\_q6\_policy\_evaluation

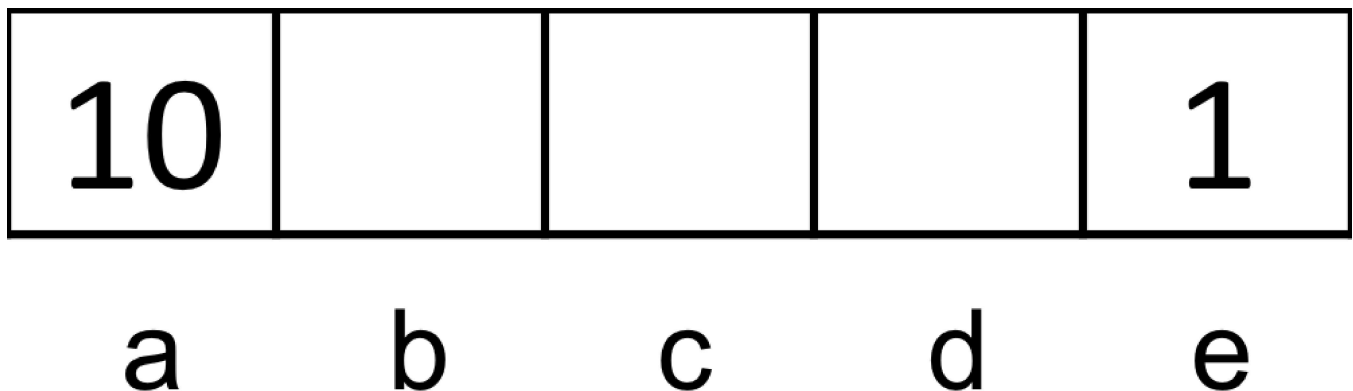
### Question 6: Policy Evaluation

10/10 points (ungraded)

Consider the gridworld where Left and Right actions are successful 100% of the time.

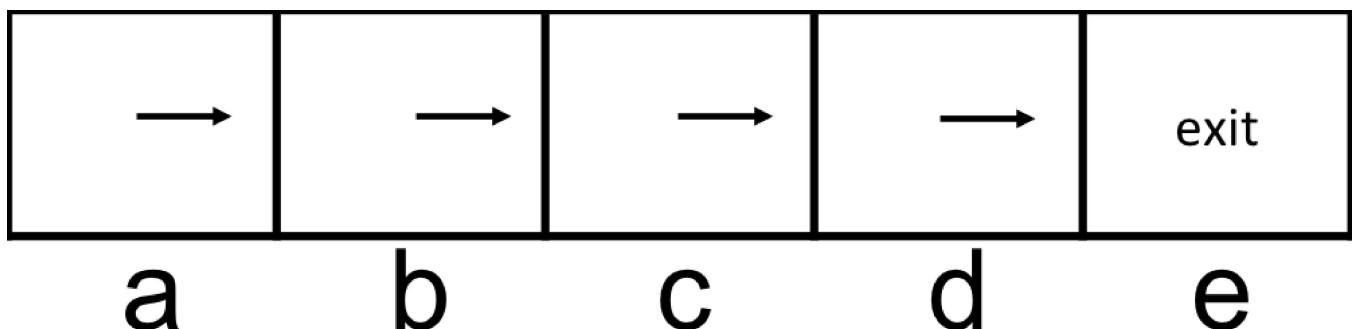
Specifically, the available actions in each state are to move to the neighboring grid squares. From state **a**, there is also an exit action available, which results in going to the terminal state and collecting a reward of 10. Similarly, in state **e**, the reward for the exit action is 1. Exit actions are successful 100% of the time.

The discount factor ( $\gamma$ ) is 1.



#### Part 1

Consider the policy  $\pi_1$  shown below, and evaluate the following quantities for this policy.



$$V^{\pi_1}(a) =$$



$$V^{\pi_1}(b) =$$



$$V^{\pi_1}(c) =$$



$$V^{\pi_1}(d) =$$

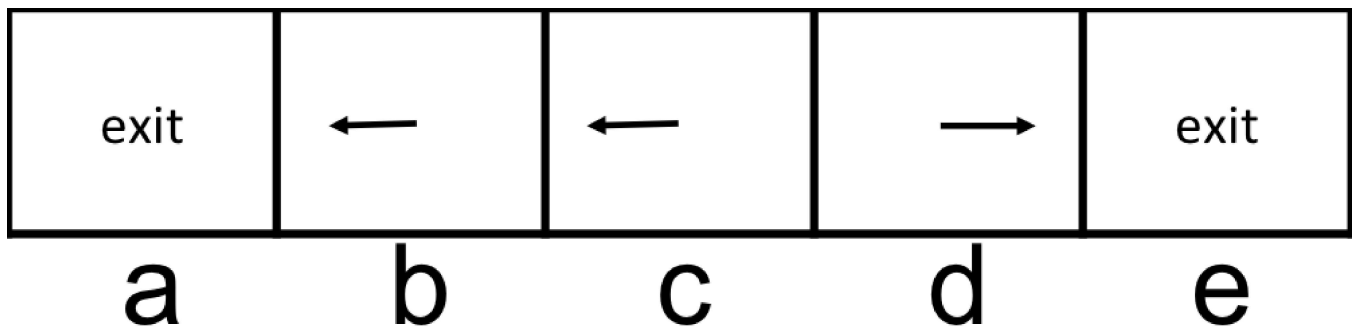


$$V^{\pi_1}(e) =$$



Part 2

Consider the policy  $\pi_2$  shown below, and evaluate the following quantities for this policy.



$$V^{\pi_2}(a) =$$



$$V^{\pi_2}(b) =$$



$$V^{\pi_2}(c) =$$



$V^{\pi_2}(d) =$



$V^{\pi_2}(e) =$



Submit

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✓ Correct (10/10 points)