

✔ Selamat! Anda lulus!

Nilai
diterima 100%Nilai Pengiriman
Terbaru 100%UNTUK LULUS 80% atau
lebih tinggiPergi ke item
berikutnya

1.

1 / 1 poin

You are using reinforcement learning to control a four legged robot. The position of the robot would be its _____.

- ☐ action
- ☐ reward
- ☒ state
- ☐ return

✔ Benar
Great!

2.

1 / 1 poin

You are controlling a Mars rover. You will be very very happy if it gets to state 1 (significant scientific discovery), slightly happy if it gets to state 2 (small scientific discovery), and unhappy if it gets to state 3 (rover is permanently damaged). To reflect this, choose a reward function so that:

- ☒ $R(1) > R(2) > R(3)$, where $R(1)$ and $R(2)$ are positive and $R(3)$ is negative.
- ☐ $R(1) < R(2) < R(3)$, where $R(1)$ and $R(2)$ are negative and $R(3)$ is positive.
- ☐ $R(1) > R(2) > R(3)$, where $R(1)$, $R(2)$ and $R(3)$ are negative.
- ☐ $R(1) > R(2) > R(3)$, where $R(1)$, $R(2)$ and $R(3)$ are positive.

✔ Benar
Good job!

3.

1 / 1 poin

You are using reinforcement learning to fly a helicopter. Using a discount factor of 0.75, your helicopter starts in some state and receives rewards -100 on the first step, -100 on the second step, and 1000 on the third and final step (where it has reached a terminal state). What is the return?

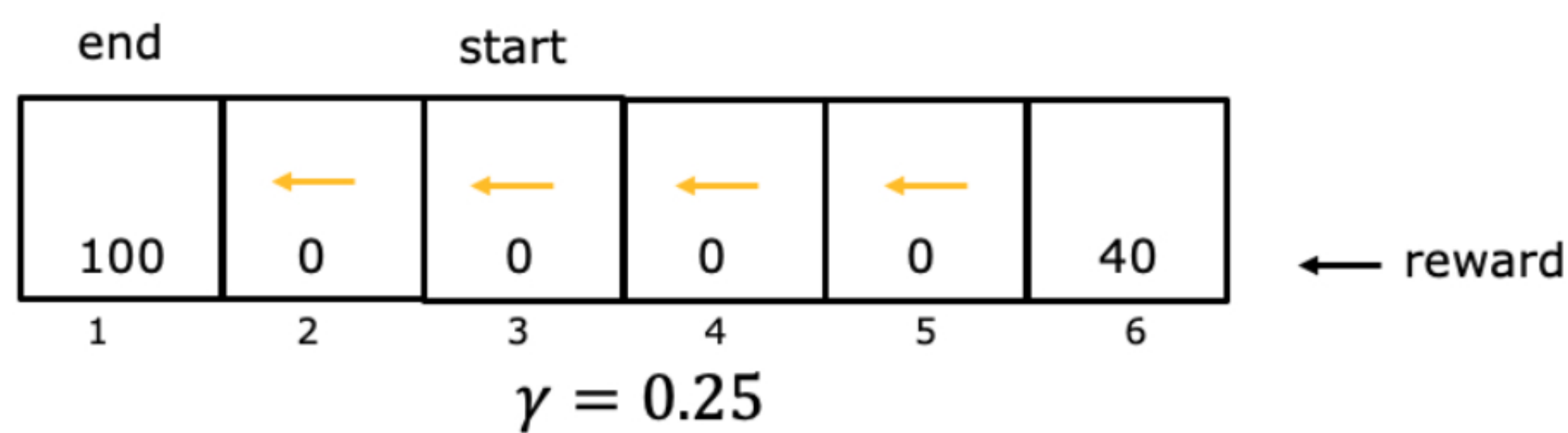
- ☐ $-100 - 0.25 \cdot 100 + 0.25^2 \cdot 1000$
- ☐ $-0.75 \cdot 100 - 0.75^2 \cdot 100 + 0.75^3 \cdot 1000$
- ☐ $-0.25 \cdot 100 - 0.25^2 \cdot 100 + 0.25^3 \cdot 1000$
- ☒ $-100 - 0.75 \cdot 100 + 0.75^2 \cdot 1000$

✔ Benar
Awesome!

4.

1 / 1 poin

Given the rewards and actions below, compute the return from state 3 with a discount factor of $\gamma = 0.25$.



- ☐ 25
- ☐ 0
- ☒ 6.25
- ☐ 0.39

✔ Benar
If starting from state 3, the rewards are in states 3, 2, and 1. The return is $0 + (0.25) \times 0 + (0.25)^2 \times 100 = 6.25$.