Kahoot!

# Lecture 02: Dynamic Programming

#cs #rl

92 plays · 155 players

A public kahoot

## Questions (6)

1 - Quiz

**Dynamic programming can be applied if ...** 60 sec

- the principle of suboptimality holds true. ✗
- subproblems are independent. ✗
- the optimal solution can be decomposed into subproblems. ✓
- subproblems occur only once. ✗

2 - Quiz

**Prediction vs Control: what is correct?** 60 sec

- For control, the policy is an input. ✗
- For control, an arbitrary policy is the output. ✗
- For prediction, the optimal value function is the output. ✗
- For prediction, a value function for given $\pi$ is the output. ✓

3 - Quiz

**For iterative policy evaluation, we iteratively apply the ...** 30 sec

- Bellman expectation equation ✓
- Bellman optimality equation ✗

4 - Quiz

**In policy iteration, we interleave ...** 60 sec

- policy evaluation and improvement. ✓
- policy evaluation and value iteration. ✗
- policy improvement and value iteration. ✗
- policy evaluation and dynamic programming. ✗

5 - Quiz

**In value iteration, we...** 60 sec

- iteratively apply the Bellman expectation equation. ✗
- iteratively apply the Bellman optimality equation. ✓
- have corresponding policies in each iteration. ✗
- iteratively improve the value function until convergence. ✓

6 - Quiz

**How to break the curse of dimensionality for DP?** 60 sec

- Use value iteration instead of policy iteration. ✗
- Sample backups instead of full-width backups. ✓
- Learn a model of the environment. ✗