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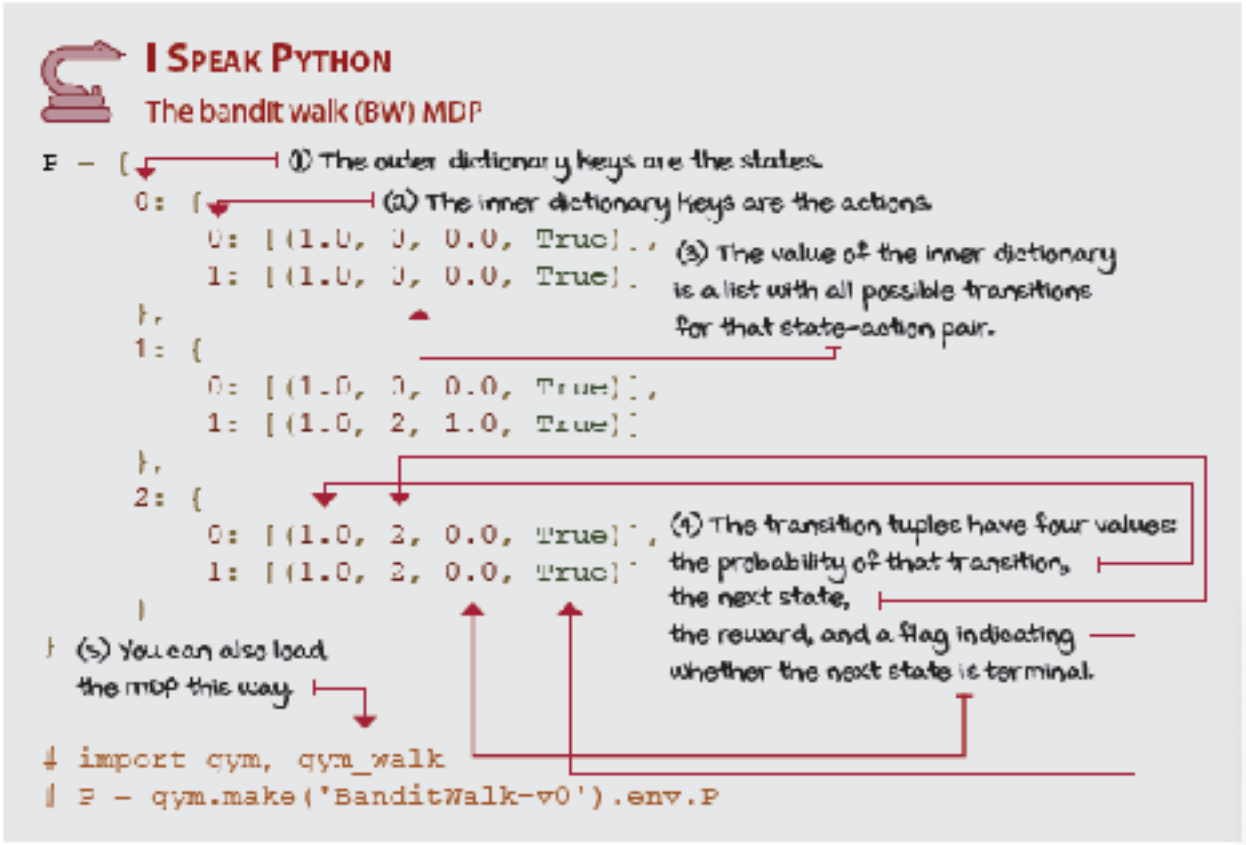
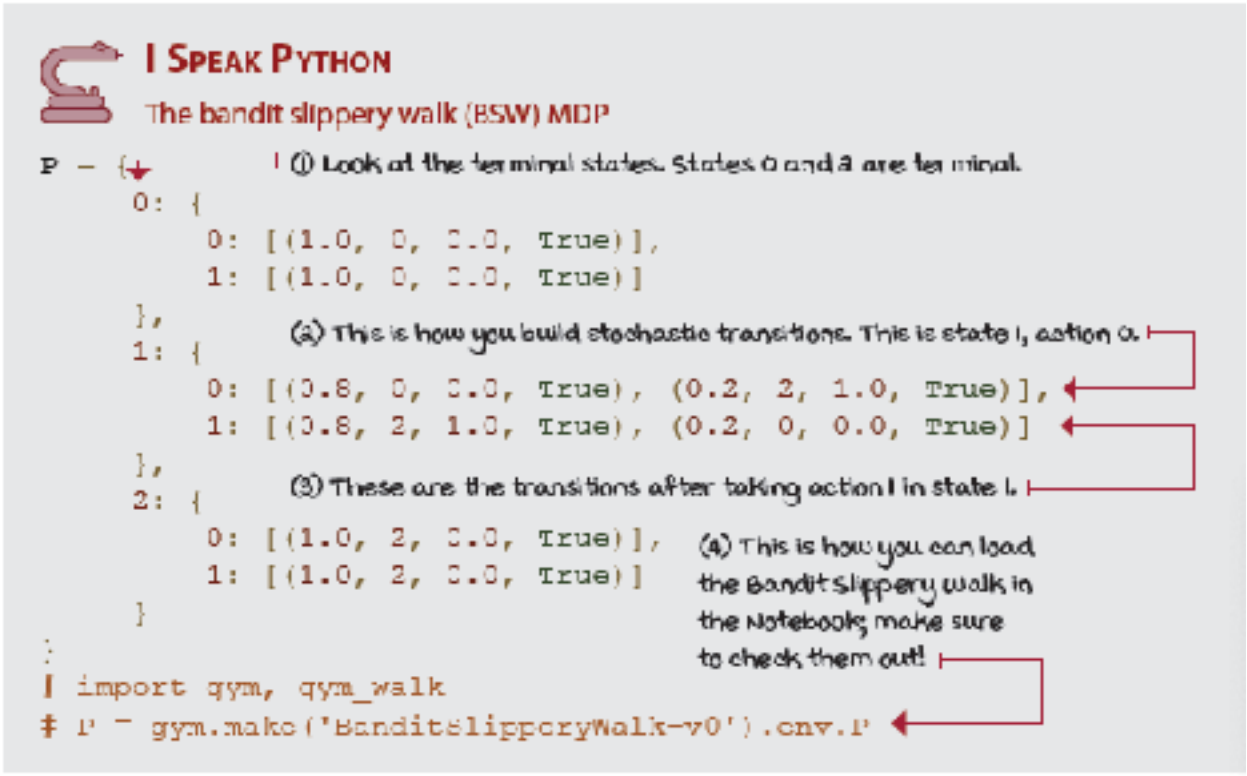
21AIE311 - Reinforcement Learning
Lab Worksheet - 3
Bandit Walk (BW), Bandit Slippery Walk (BSW) and Frozen Lake (FL) Environment Setup

Excercise

1. Write a simple python code to model the Bandit Walk (BW) environment using python Dictionary data structure. Note: Action 0-Left and 1-Right.



2. Write a simple python code to model the Bandit Slippery Walk (BSW) environment using python Dictionary data structure.



Assignment

1. Write a simple python code to model the Frozen Lake (FL) environment using python Dictionary data structure.
2. Write a simple python code to model the Walk Three environment using python Dictionary data structure.

Walk Three Environment Properties

- Deterministic environment
- 3 non-terminal states, 2 terminal states
- only reward is at the right-most cell in the walk
- episodic environment, the agent terminates at the left- or right-most cell
- agent starts in state 2 (middle of the walk) T-1-2-3-T
- actions left (0) or right (1)

0 (Hole, Terminal)	1	2	3	4 (Goal, Terminal)