## $A 3 \rightarrow A 2 \rightarrow B - 4 \rightarrow A 4 \rightarrow B - 3 \rightarrow T$

## Compute G (returns) from each visit:

State A (visited at time 0, 1, 3)

• Visit 1 (t=0):

$$G = 3 + 2 + (-4) + 4 + (-3) = 2$$

• Visit 2 (t=1):

$$G = 2 + (-4) + 4 + (-3) = -1$$

• Visit 3 (t=3):

$$G = 4 + (-3) = 1$$

 $\rightarrow$  Add all to Returns(A):

$$Returns(A) = [2, -1, 1]$$

## State B (visited at time 2, 4)

• Visit 1 (t=2):

$$G = -4 + 4 + (-3) = -3$$

• Visit 2 (t=4):

$$G = -3$$

→ Add all to Returns(B):

$$Returns(B) = [-3, -3]$$

State	Returns	Estimated Value (Average)
А	[2, -1, 1]	$V(A) = rac{2+(-1)+1}{3} = rac{2}{3} pprox 0.67$
В	[-3, -3]	$V(B) = rac{-3 + (-3)}{2} = -3$