

5

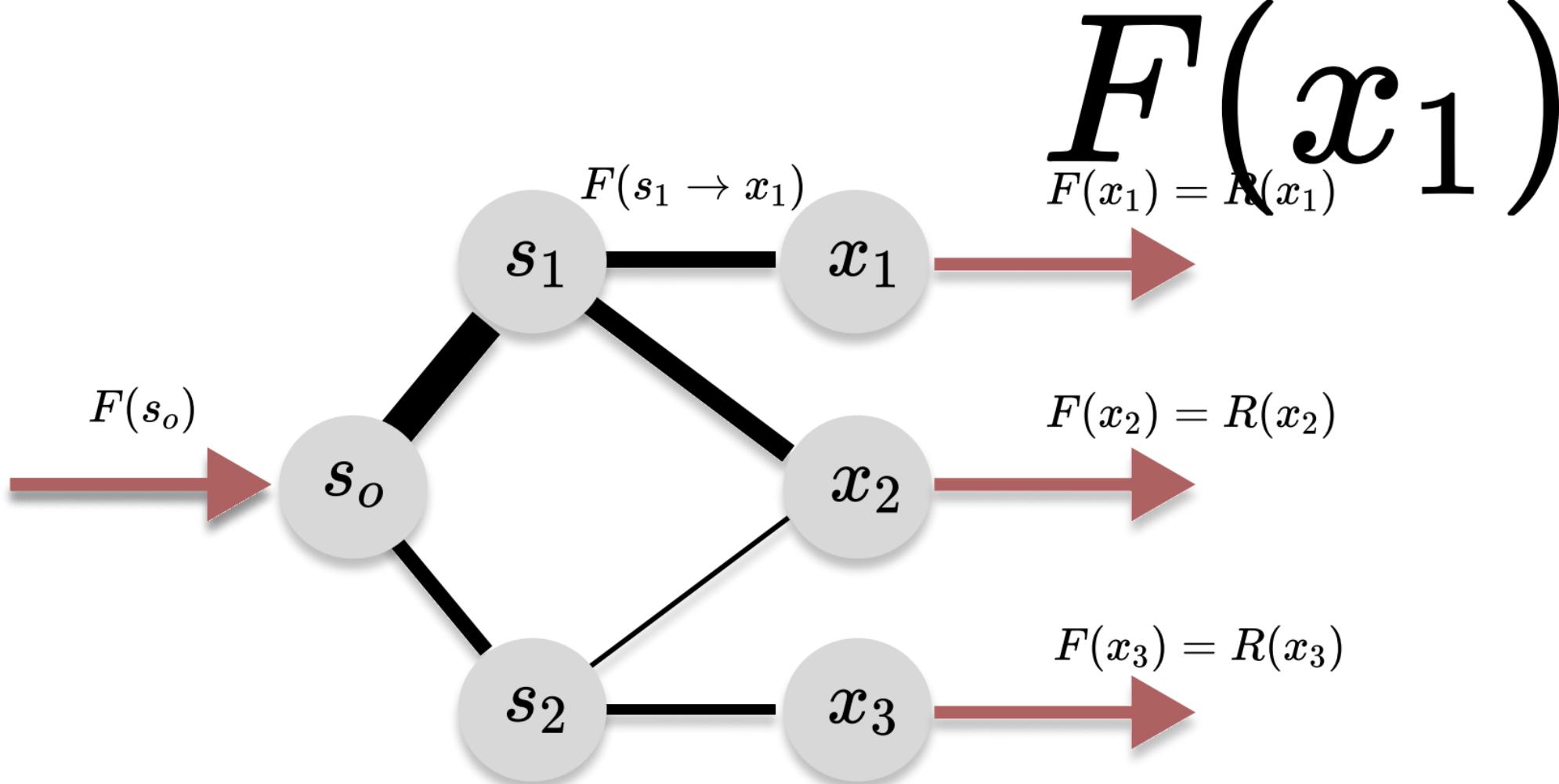
4

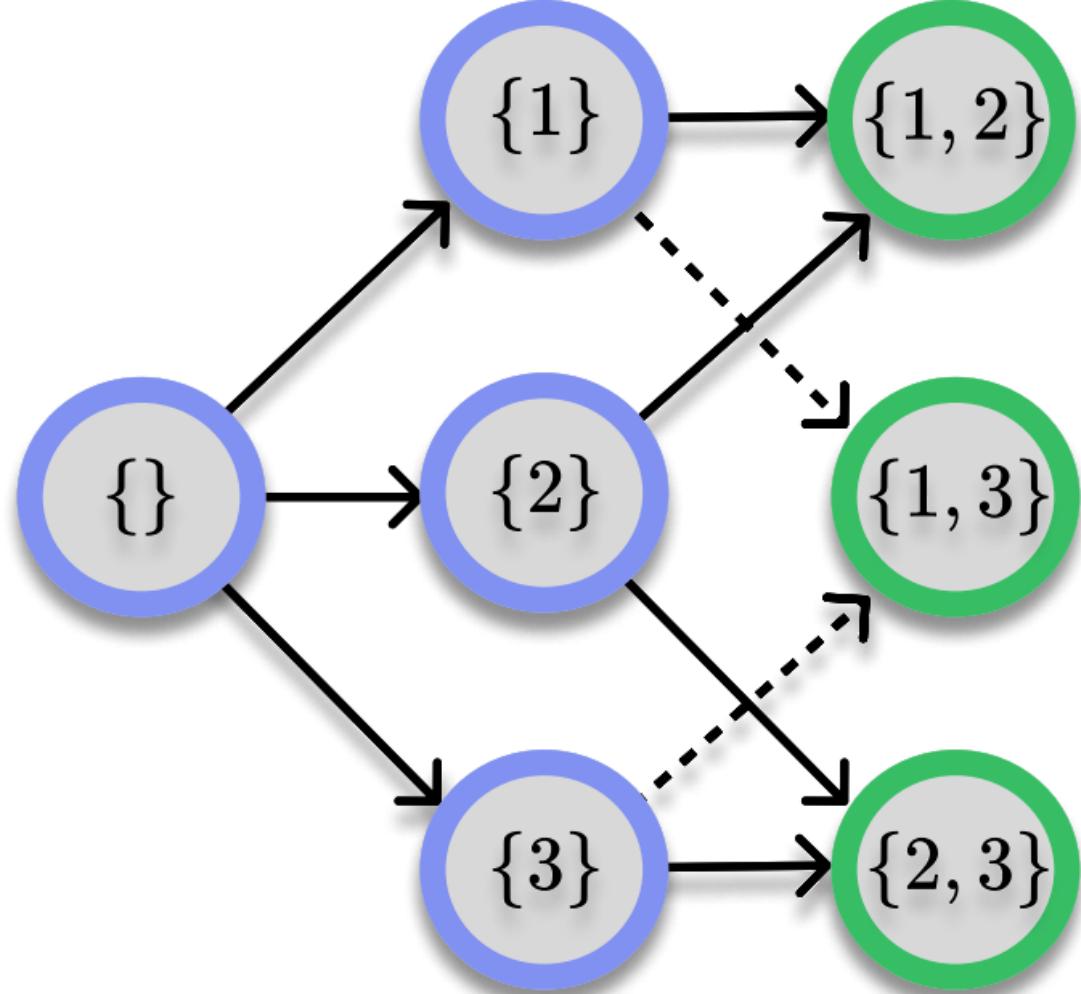
3

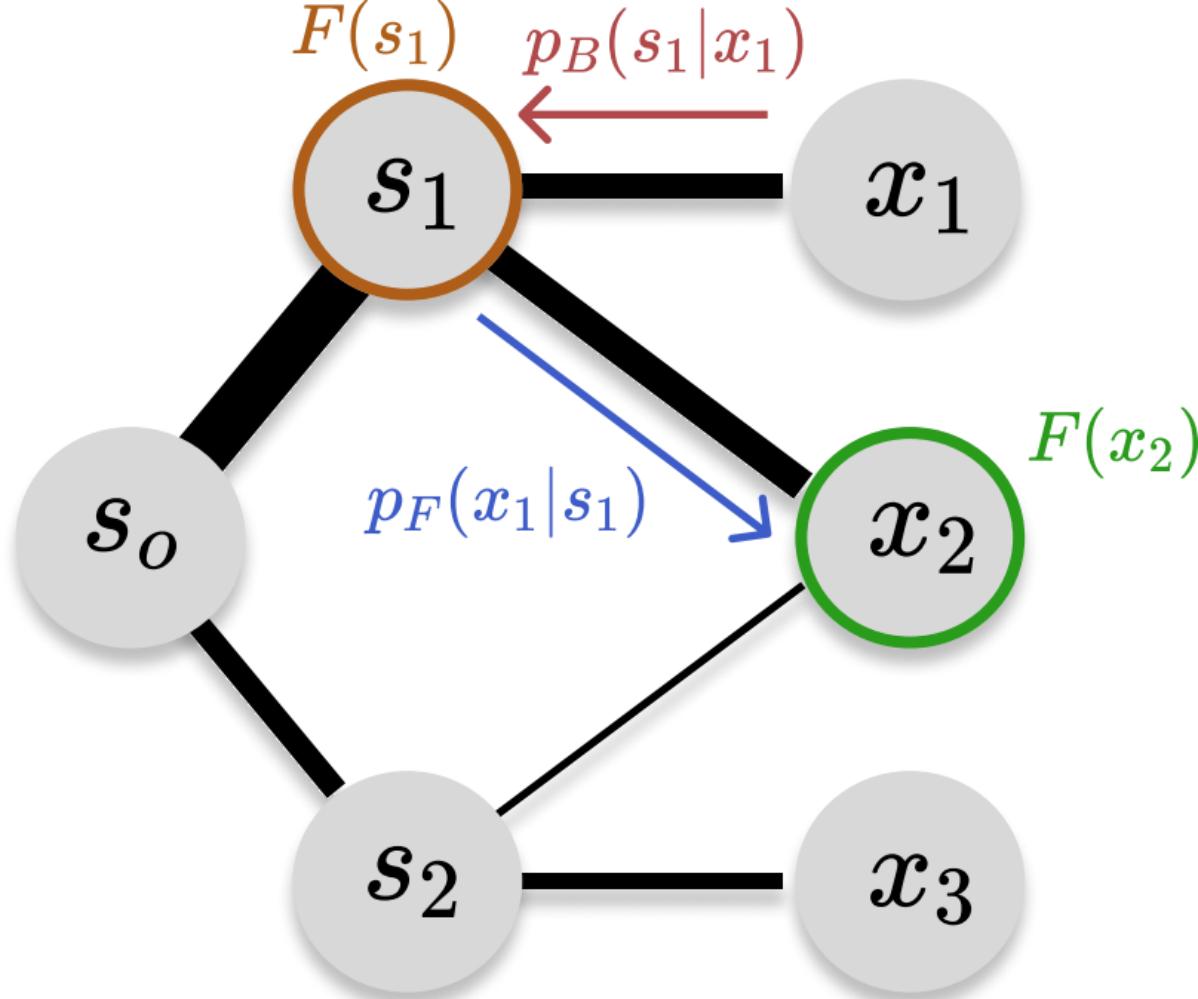
1

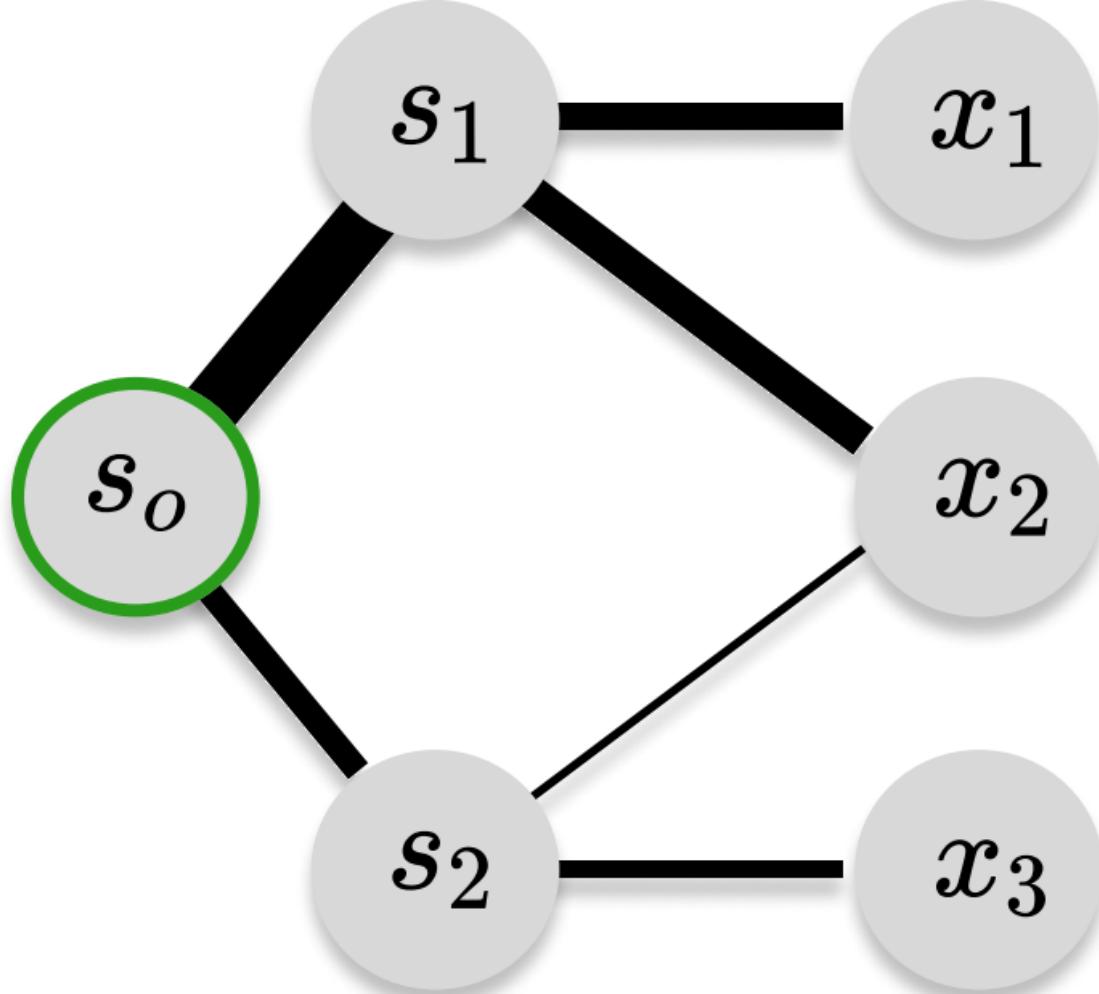
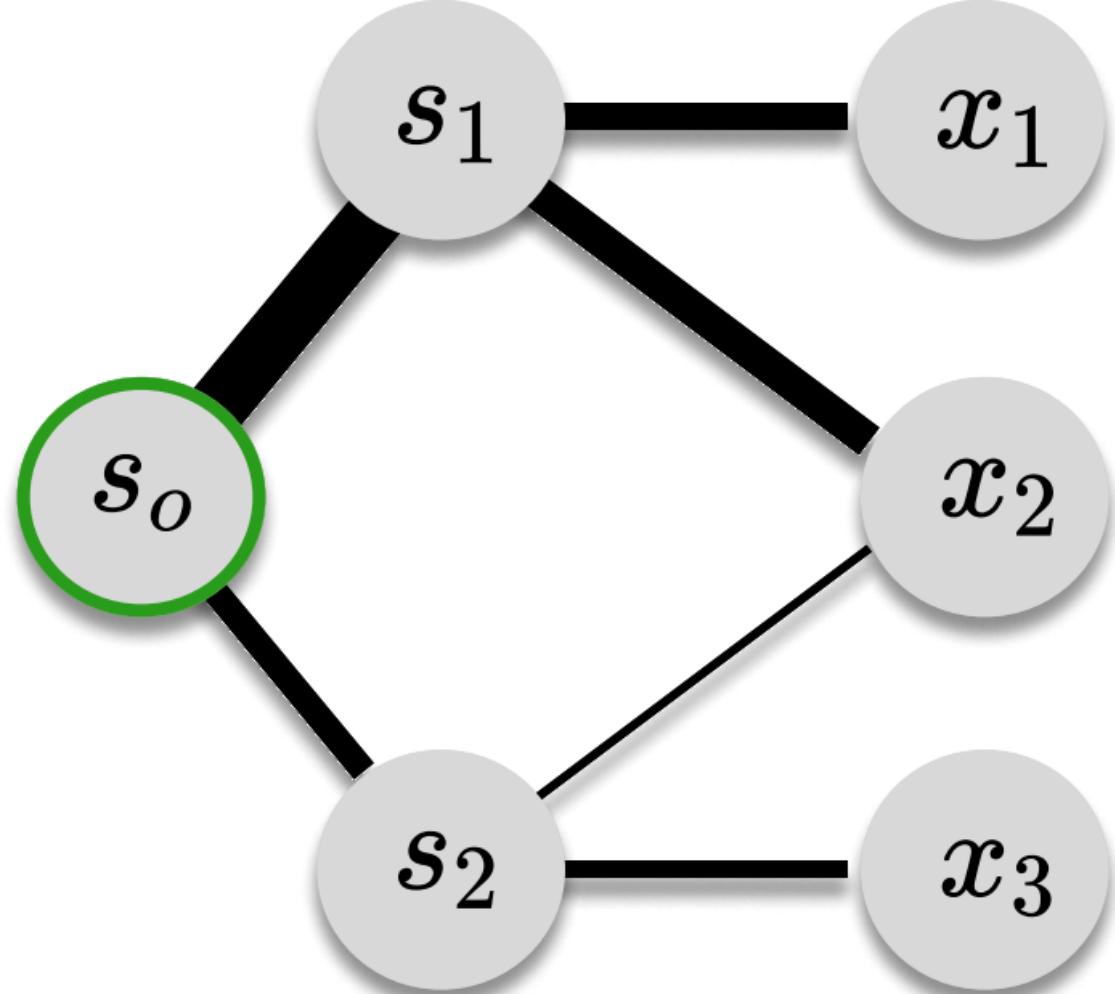
2

A natural language sentence has a compositional structure

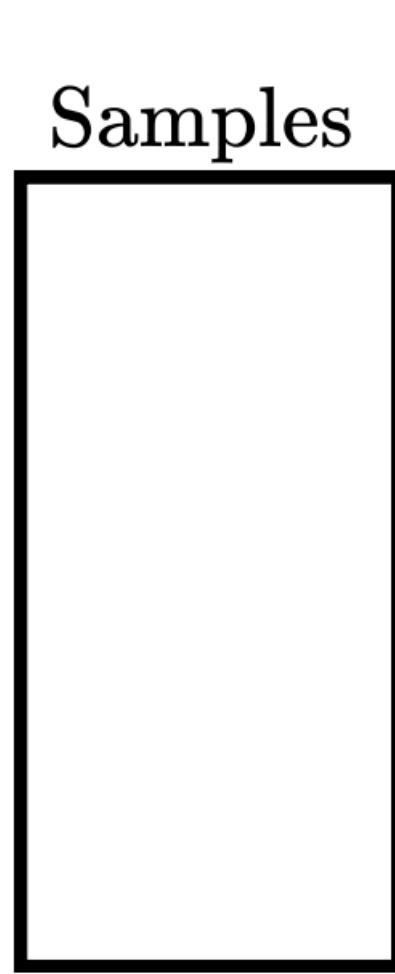
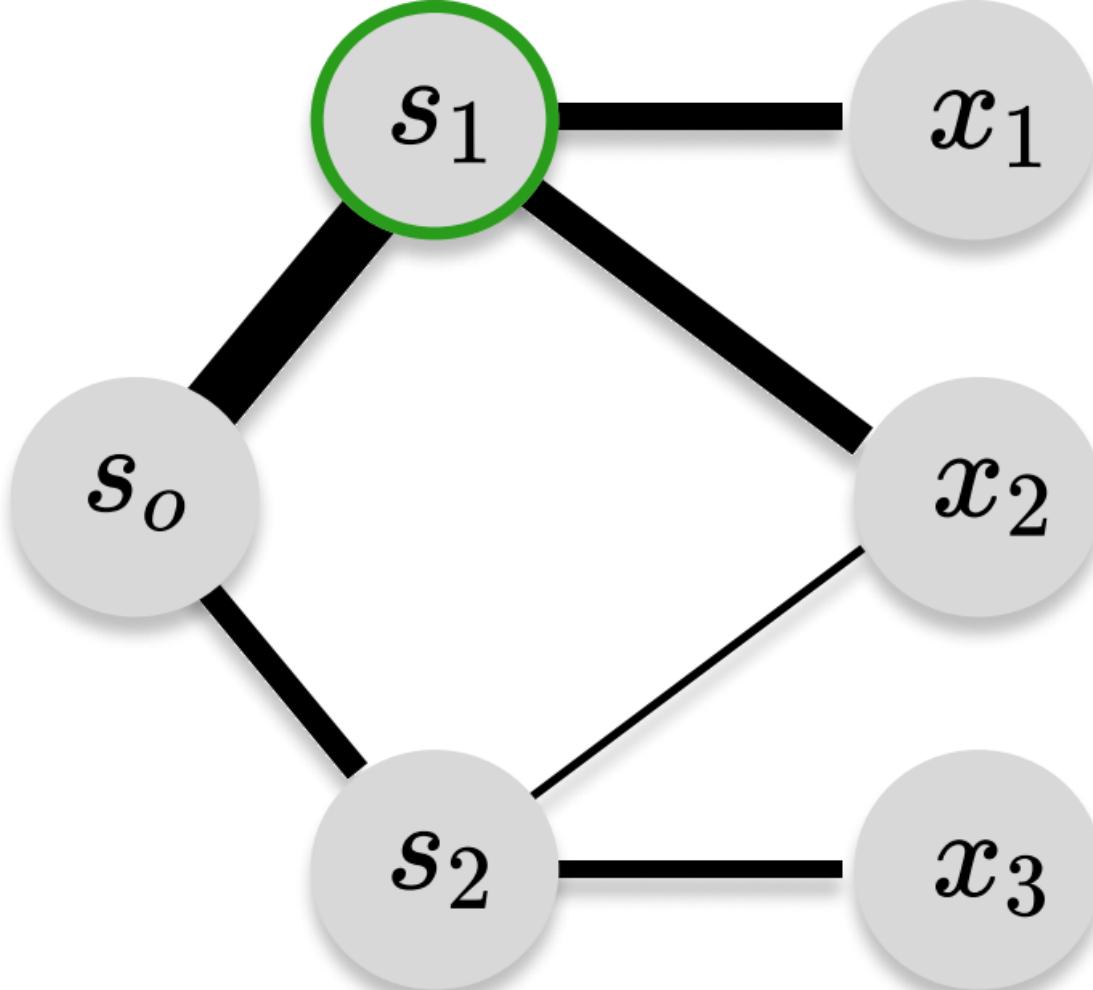
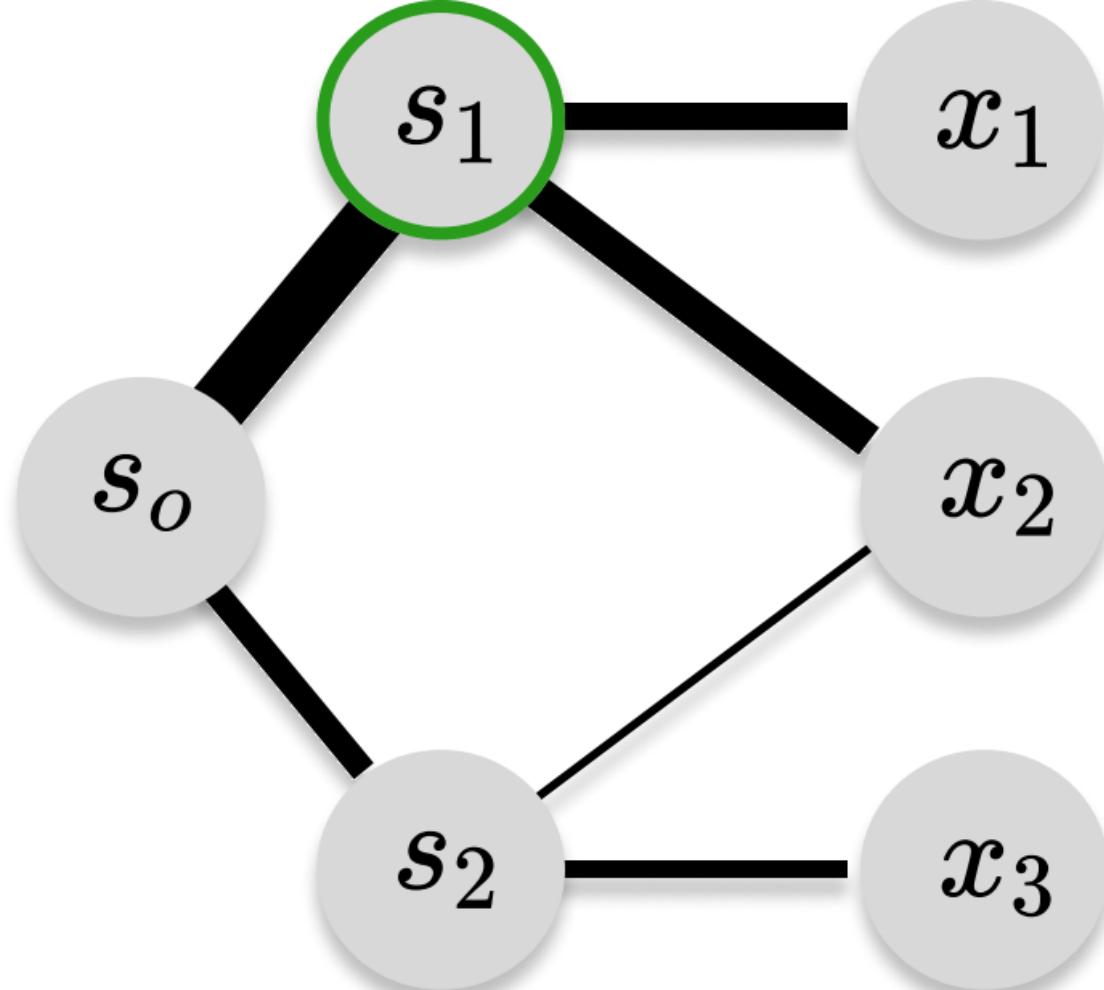


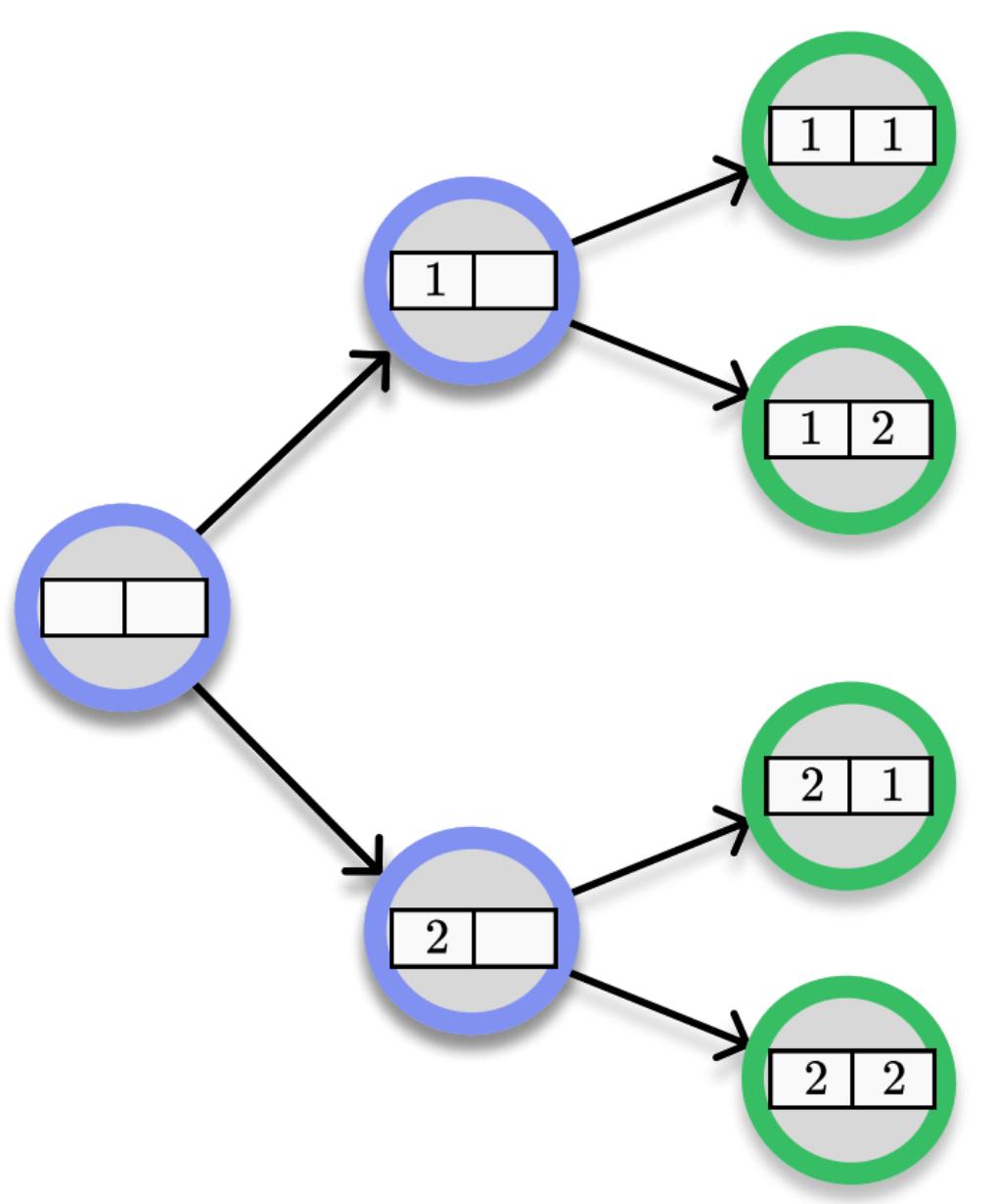


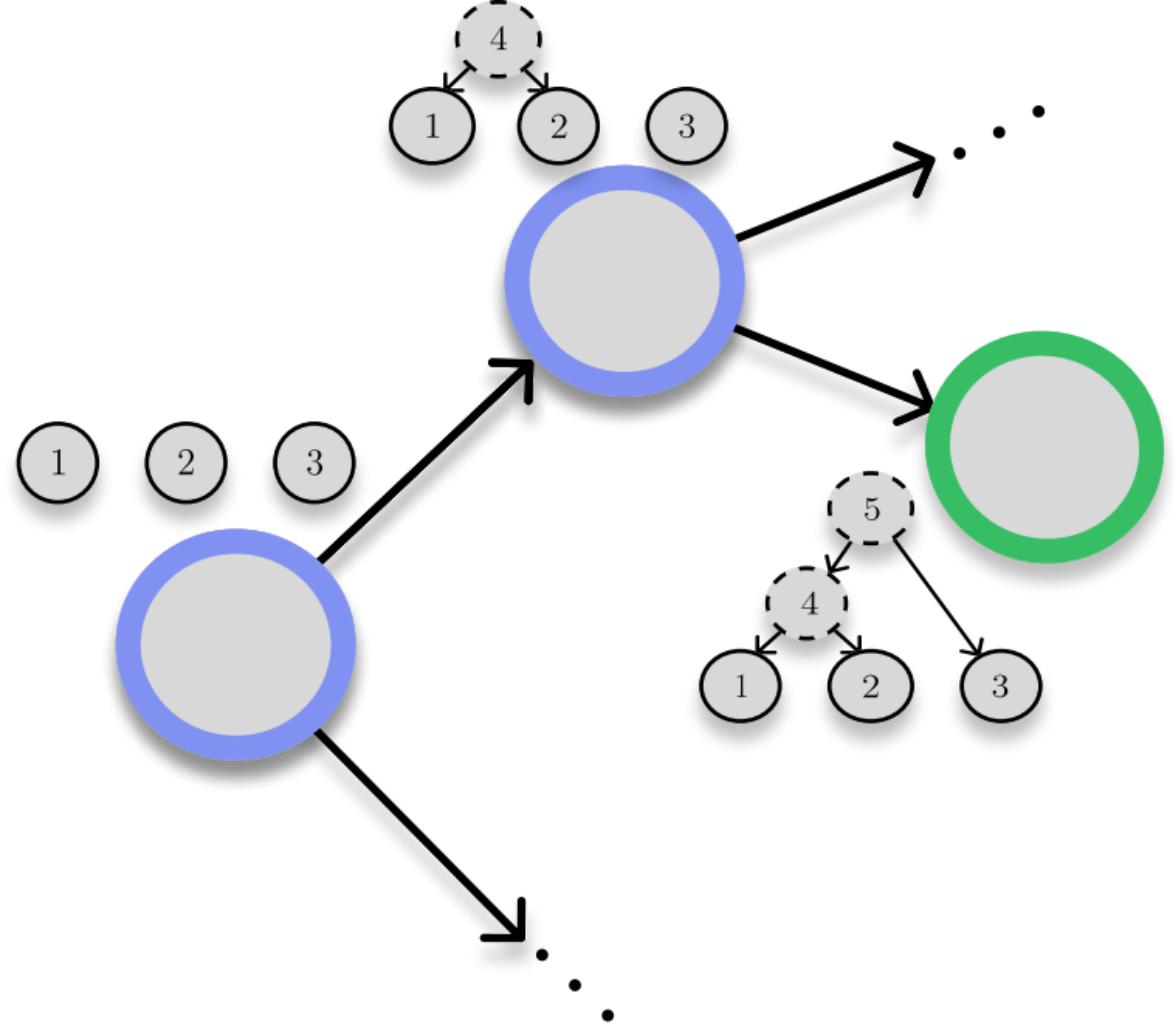


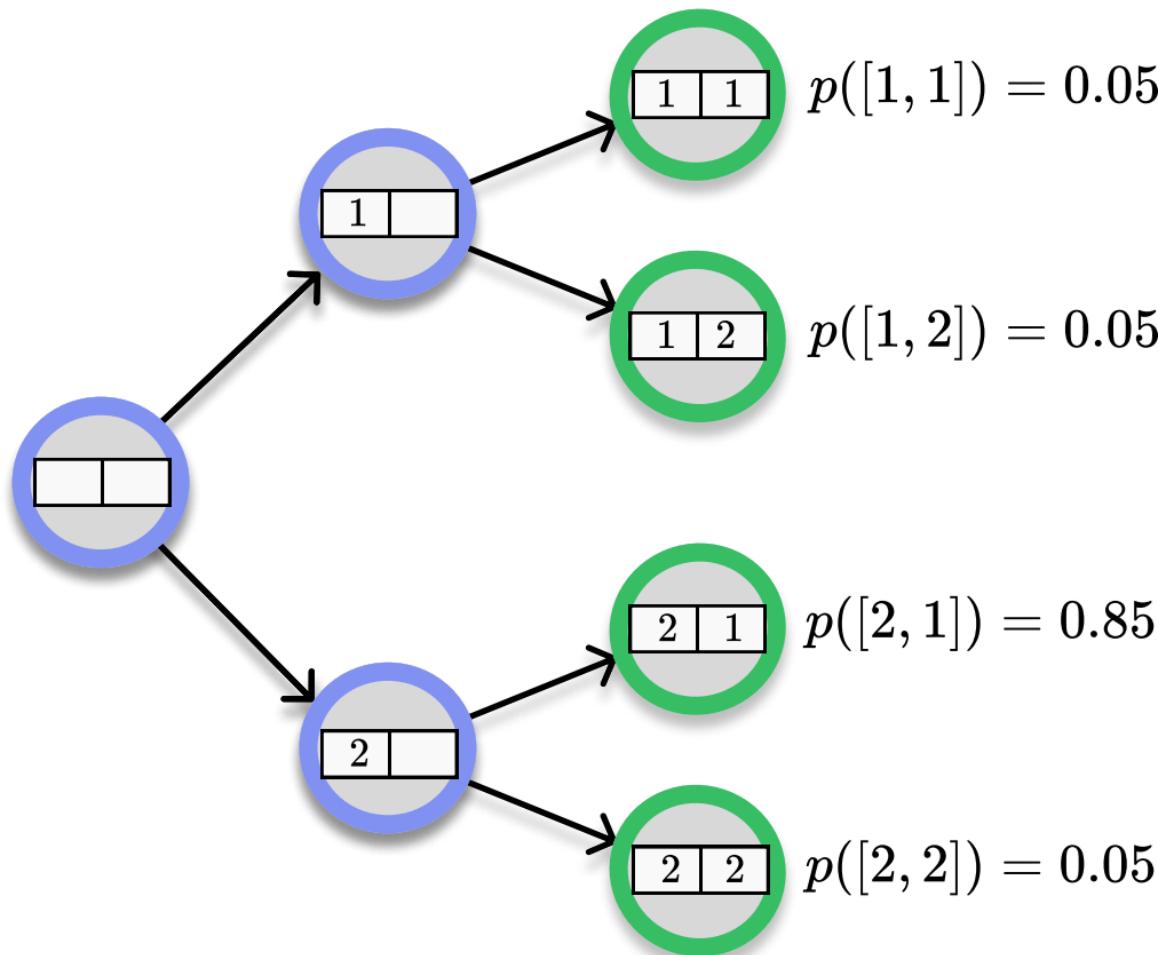


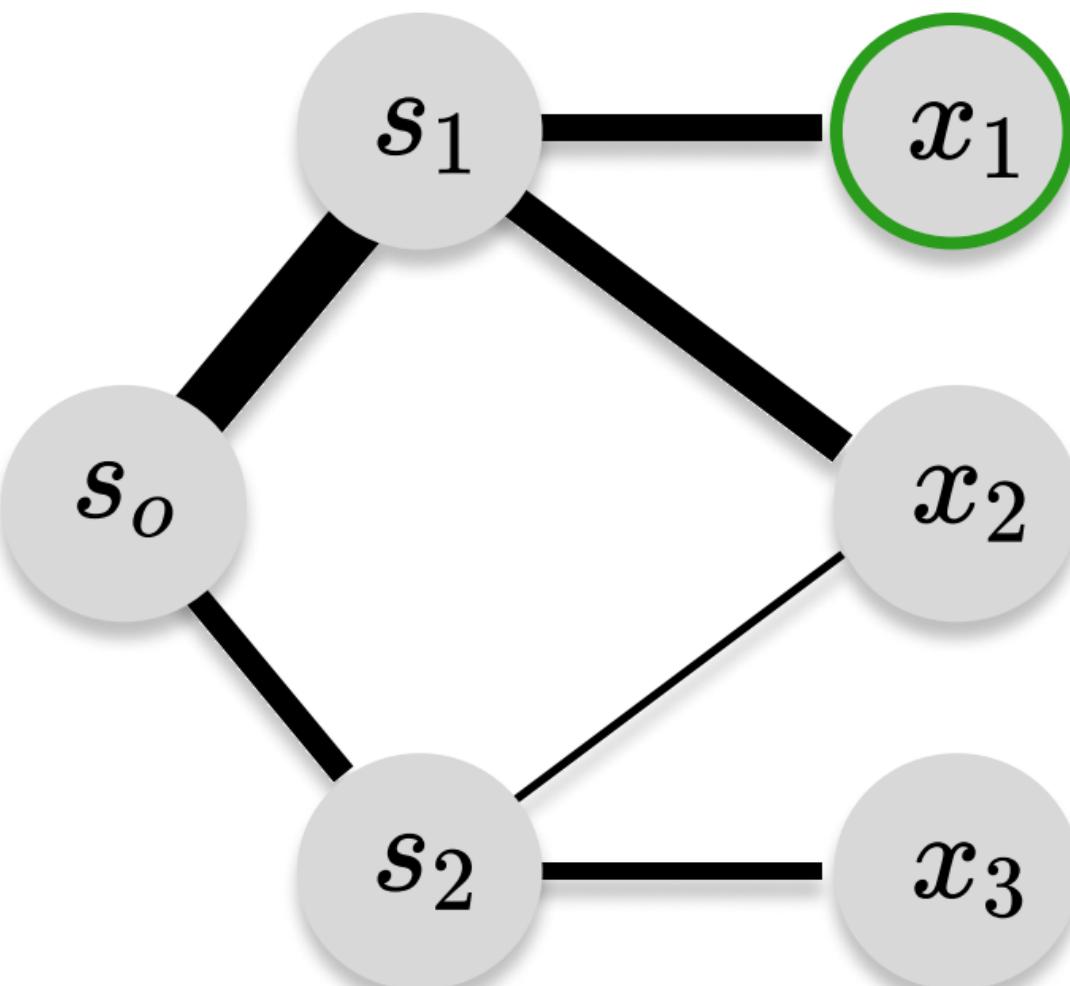
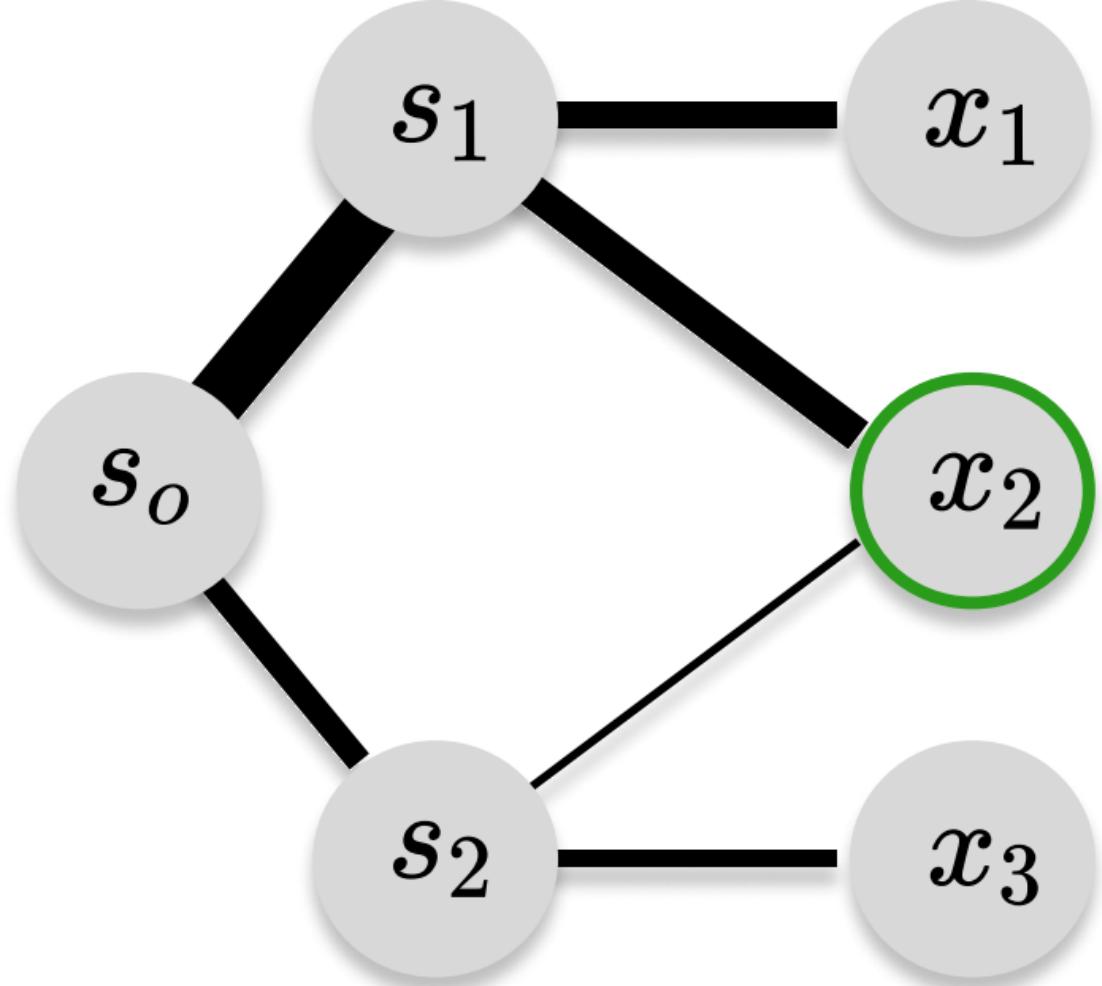
Samples







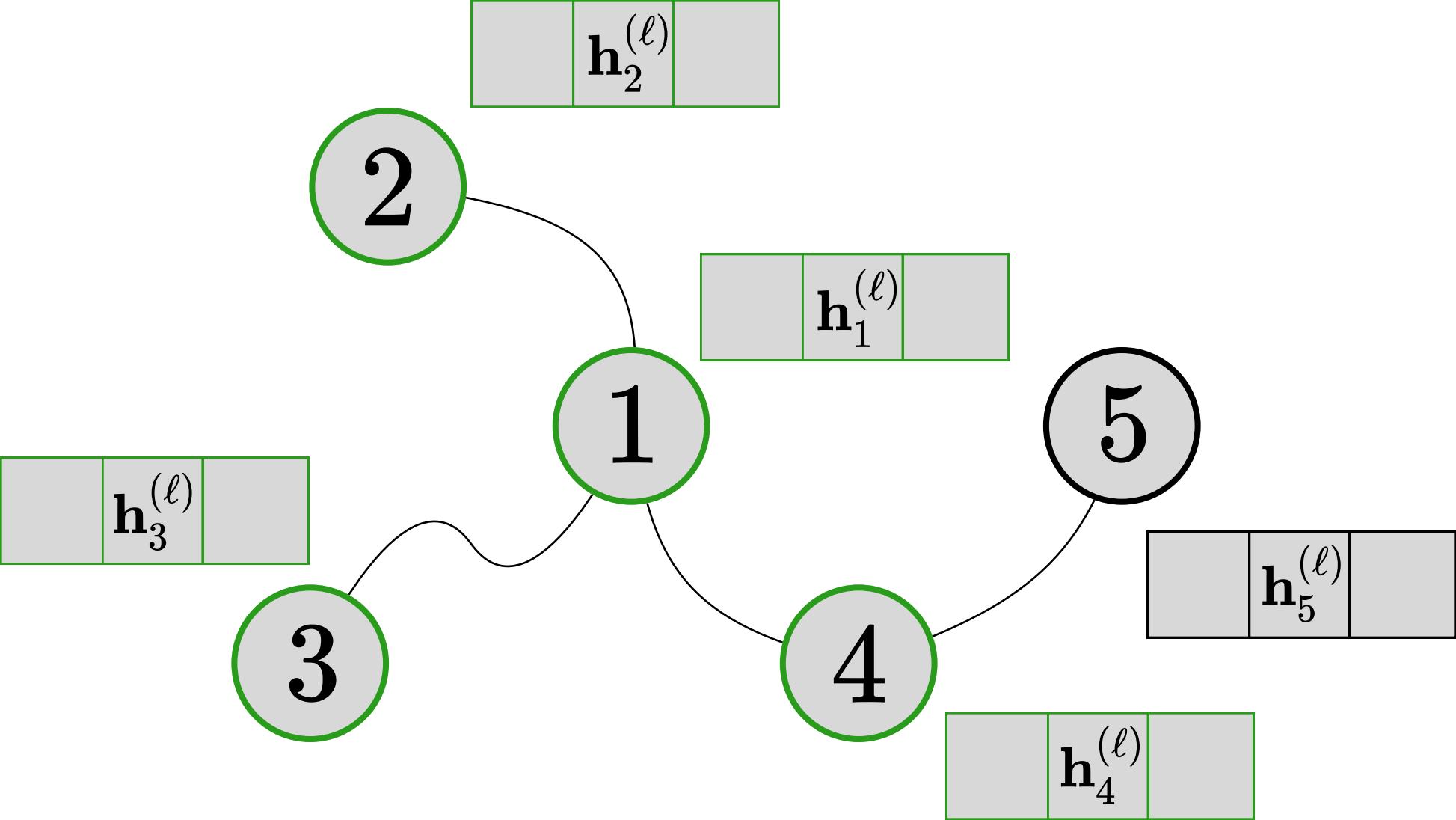


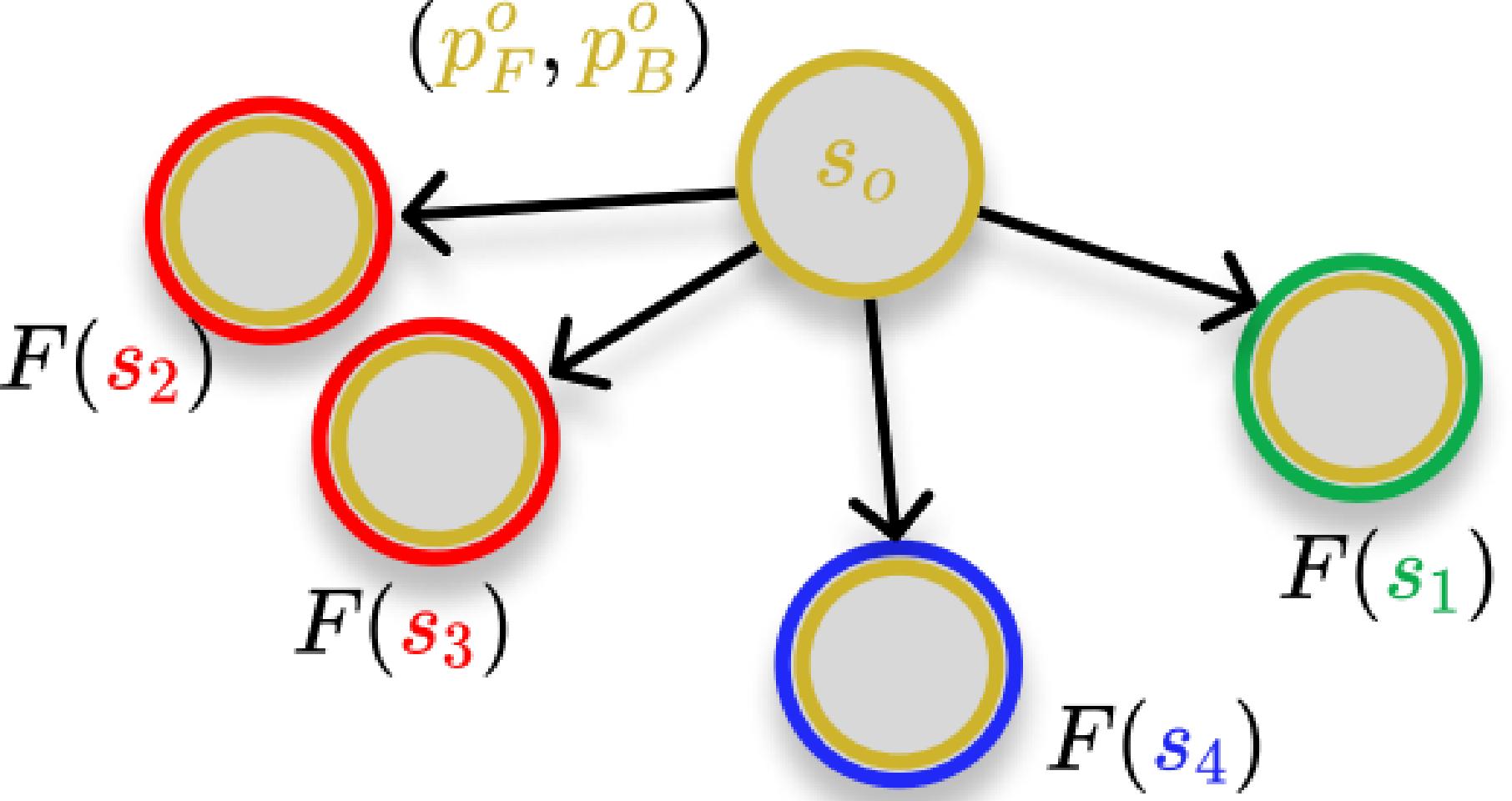


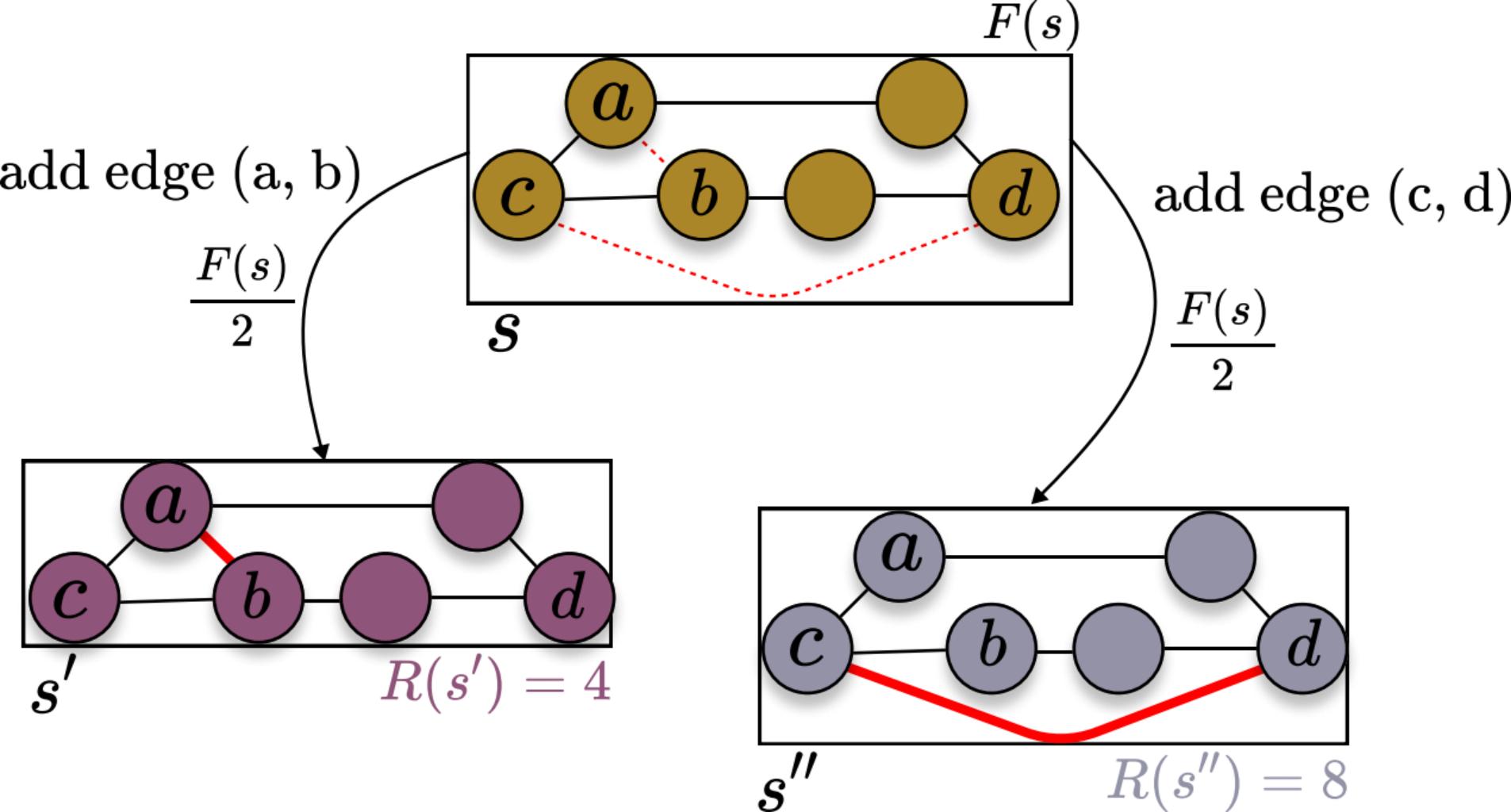
Samples

$x_1$

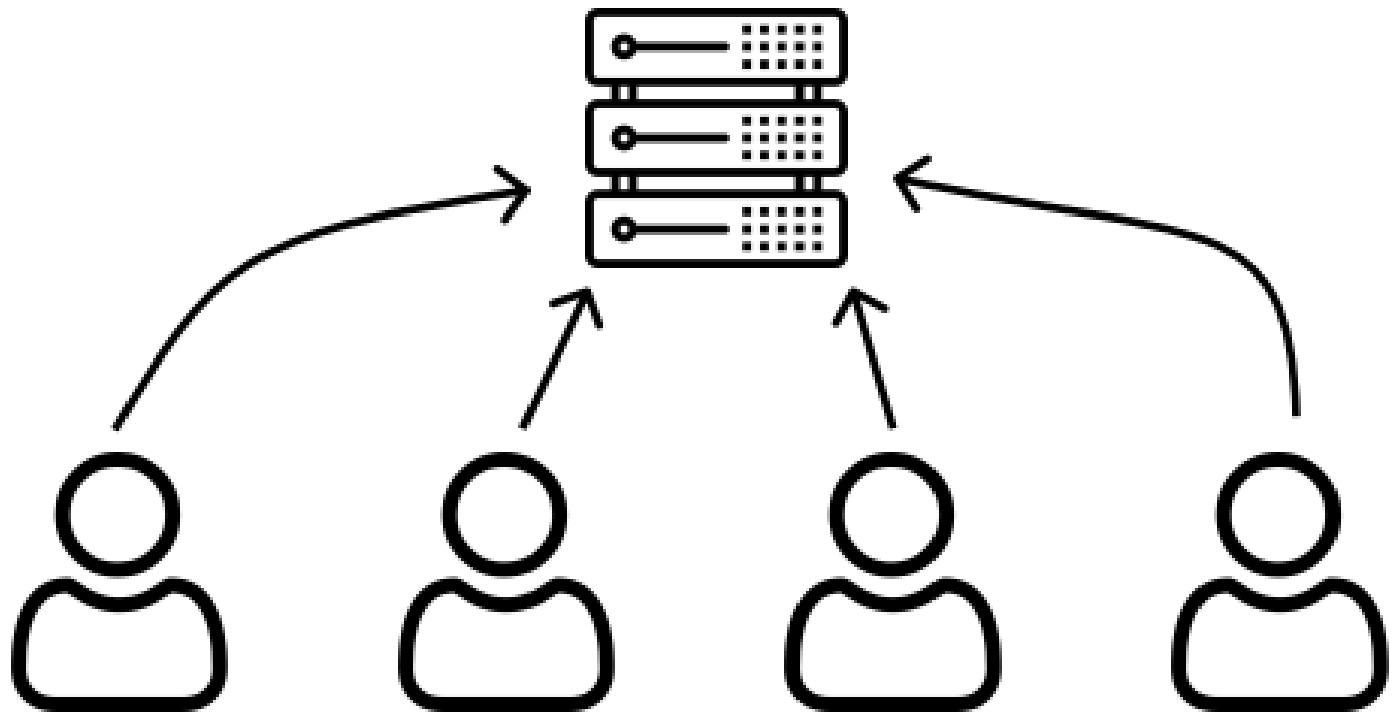
$x_2$







$$q^*(x) \propto \prod_{i=1}^N q_i(x) \approx \prod_{i=1}^N \pi_i(x) \propto \pi(x | \cup_{i=1}^N \mathcal{D}_i)$$



$$q_1(x) \approx \pi_1(x) \quad q_2(x) \approx \pi_2(x) \quad q_3(x) \approx \pi_3(x) \quad q_4(x) \approx \pi_4(x)$$
$$\mathcal{D}_1 \quad \mathcal{D}_2 \quad \mathcal{D}_3 \quad \mathcal{D}_4$$

A

T

1

T

5

4

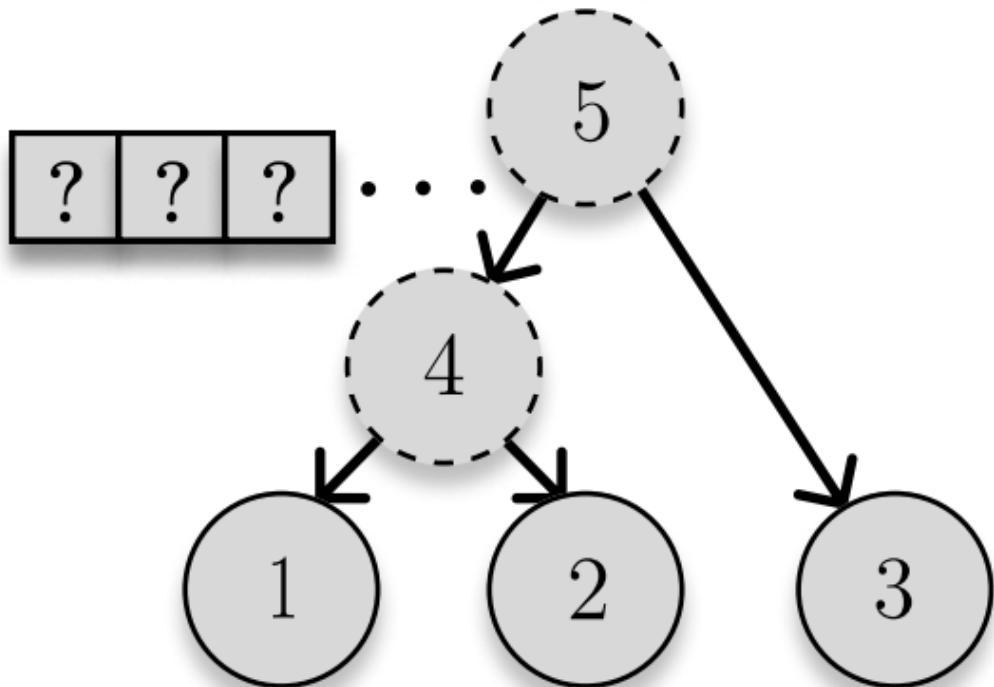
2

G

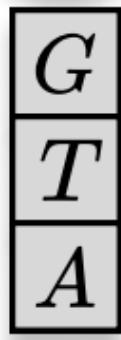
3

C





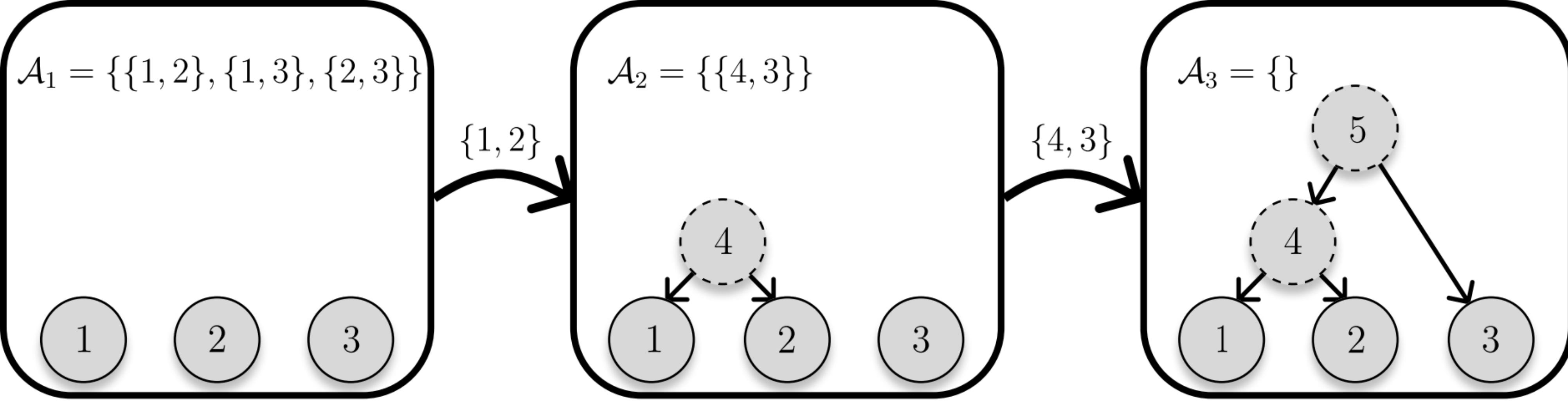
...

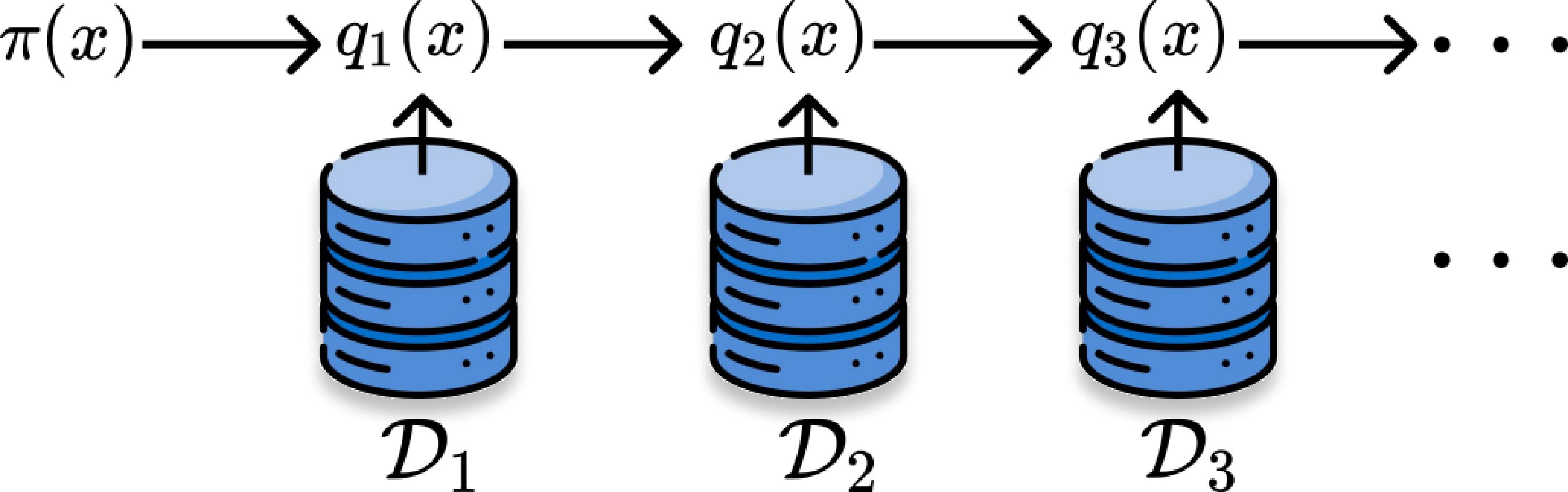


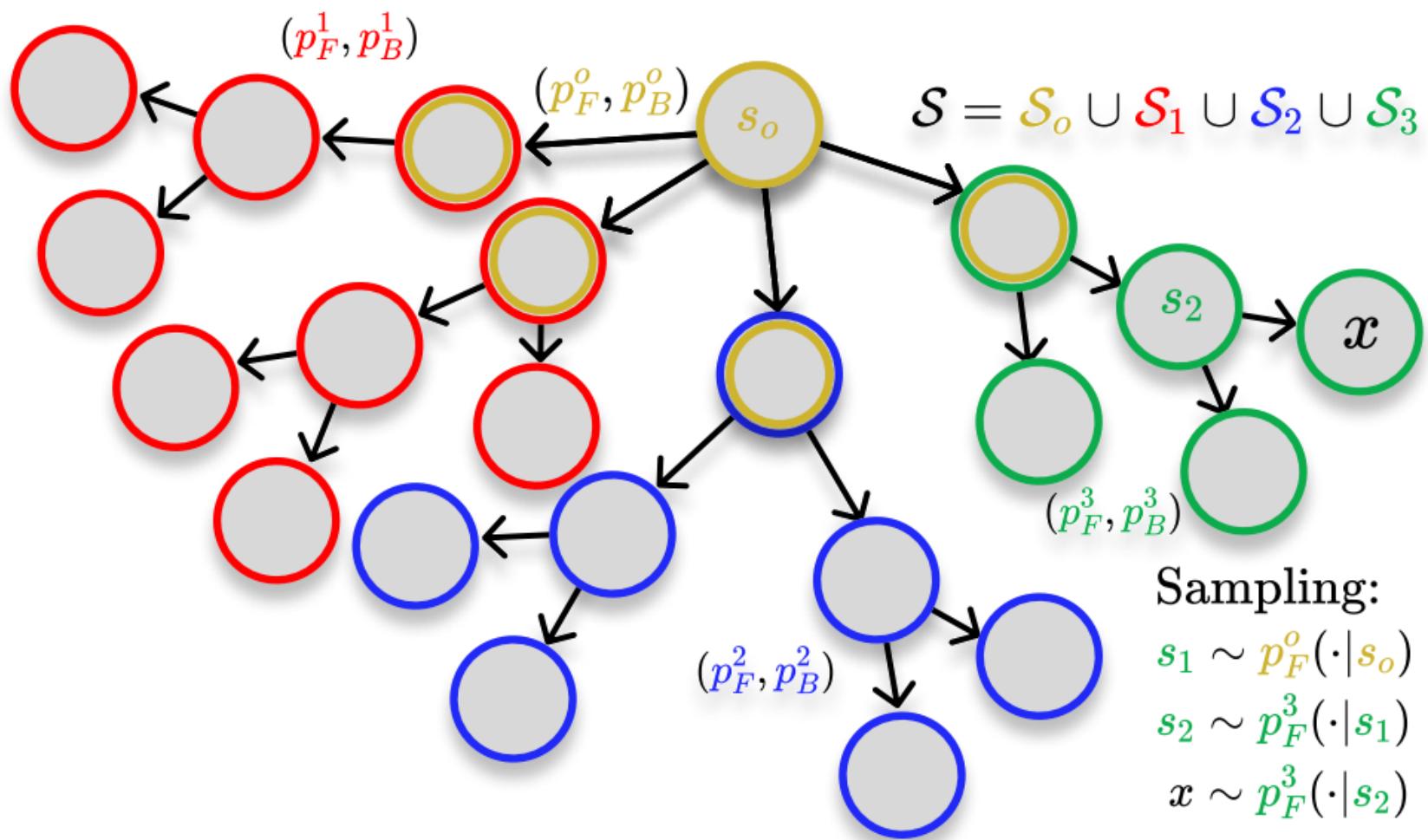
...



...







**Sampling:**  
 $s_1 \sim p_F^o(\cdot | s_o)$   
 $s_2 \sim p_F^3(\cdot | s_1)$   
 $x \sim p_F^3(\cdot | s_2)$

