

$$\text{---} X = \emptyset$$

$$\text{---} S_1 \Leftarrow \text{Next } (s_1, a) = s_2$$

$$\text{---} S_2 \Leftarrow \text{Next } (s_2, c) = s_2$$

$$\text{---} S_3 \Leftarrow \text{Next } (s_2, b) = s_3$$

$$\text{---} S_4 \Leftarrow \text{Next } (s_2, b) = s_3$$

$$\text{---} S_5 \Leftarrow \text{Next } (s_3, c) = s_4, X = X \cup \{5\} = \{5\}$$

$$\text{---} S_6 \Leftarrow \text{Next } (s_3, c) = s_4, X = X \cup \{6\} = \{5, 6\}$$