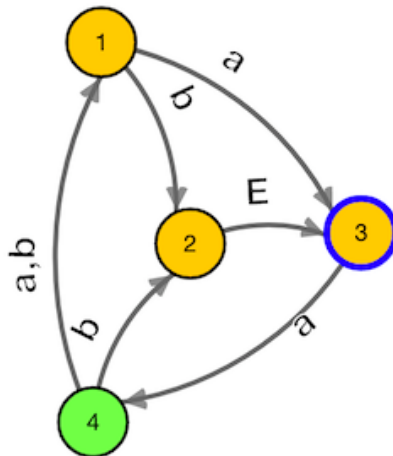


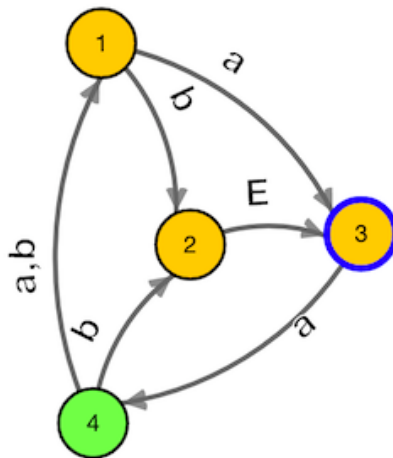
1. Consider the 4-state NFA given below and assume E represents an ϵ (epsilon) transition, State 3 is the start state and State 4 is the accept state. Which of the following represents the start state of the **equivalent DFA**? $\Sigma = \{a,b\}$.



(3 points)

- ✓ A. {3}
- B. {2,3}
- C. {2,3,4}
- D. None of the above.

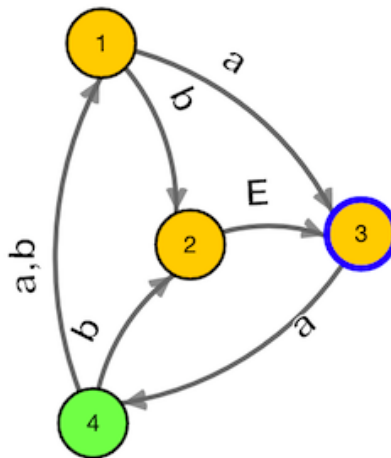
2. Consider the 4-state NFA given below and assume E represents an ϵ (epsilon) transition, State 3 is the start state and State 4 is the accept state. Which of the following is the state transitioned to from state $\{1,4\}$ upon reading an "a" from the input word in the **equivalent DFA**? $\Sigma = \{a,b\}$.



(3 points)

- A. $\{3\}$
- ✓ B. $\{1,3\}$
- C. $\{1,2,3\}$
- D. None of the above.

3. Consider the 4-state NFA given below and assume E represents an ϵ (epsilon) transition, State 3 is the start state and State 4 is the accept state. Which of the following is the state transitioned to from state {4} upon reading a "b" from the input word in the **equivalent DFA**? $\Sigma = \{a,b\}$.



(3 points)

- A. {2}
- B. {1,2}
- ✓ C. {1,2,3}
- D. None of the above.