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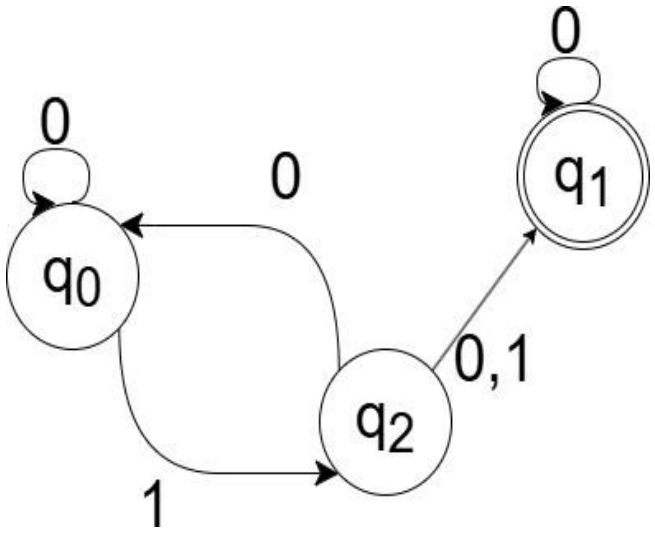
TGO B

3) Diagram Non-Deterministic Finite Automata (NFA)



Transisi DFA:

Dari state $\{q_0\}$:

- Input 0 : $\delta_{DFA}(\{q_0\}, 0) = \delta_{NFA}(q_0, 0) = \{q_0\}$
- Input 1 : $\delta_{DFA}(\{q_0\}, 1) = \delta_{NFA}(q_0, 1) = \{q_2\}$

Dari state $\{q_2\}$:

- Input 0 : $\delta_{DFA}(\{q_2\}, 0) = \delta_{NFA}(q_2, 0) = \{q_0, q_1\}$
- Input 1 : $\delta_{DFA}(\{q_2\}, 1) = \delta_{NFA}(q_2, 1) = \{q_1\}$

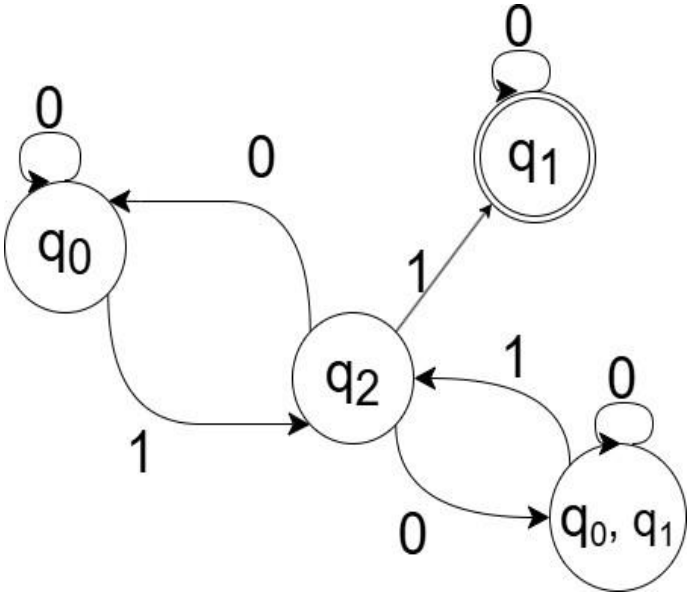
Dari state $\{q_1\}$:

- Input 0 : $\delta_{DFA}(\{q_1\}, 0) = \delta_{NFA}(q_1, 1) = \{q_1\}$
- Input 1 : $\delta_{DFA}(\{q_1\}, 1) = \delta_{NFA}(q_1, 1) = \emptyset$

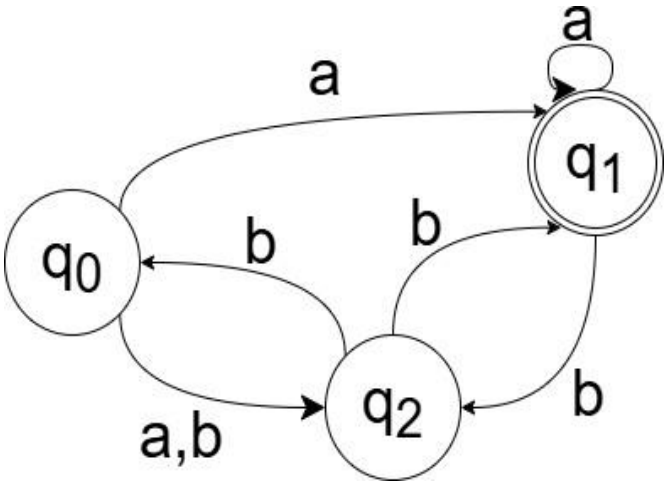
Dari state $\{q_0, q_1\}$:

- Input 0 : $\delta_{DFA}(\{q_0, q_1\}, 0) = \delta_{NFA}(q_0, 0) \cup \delta_{NFA}(q_1, 0) = \{q_0\} \cup \{q_1\} = \{q_0, q_1\}$
- Input 1 : $\delta_{DFA}(\{q_0, q_1\}, 1) = \delta_{NFA}(q_0, 1) \cup \delta_{NFA}(q_1, 1) = \{q_2\} \cup \emptyset = \{q_2\}$

Diagram Deterministic Finite Automata (DFA)



4) Diagram Non-Deterministic Finite Automata (NFA)



Transisi DFA:

Dari state $\{q_0\}$:

- Input a : $\delta_{DFA}(\{q_0\}, a) = \delta_{NFA}(q_0, a) = \{q_1, q_2\}$
- Input b : $\delta_{DFA}(\{q_0\}, b) = \delta_{NFA}(q_0, b) = \{q_2\}$

Dari state $\{q_1\}$:

- Input a : $\delta_{DFA}(\{q_1\}, a) = \delta_{NFA}(q_1, a) = \{q_1\}$
- Input b : $\delta_{DFA}(\{q_1\}, b) = \delta_{NFA}(q_1, b) = \{q_2\}$

Dari state $\{q_2\}$:

- Input a : $\delta_{DFA}(\{q_2\}, a) = \delta_{NFA}(q_1, a) = \emptyset$
- Input b : $\delta_{DFA}(\{q_2\}, b) = \delta_{NFA}(q_2, b) = \{q_0, q_2\}$

Dari state $\{q_0, q_2\}$:

- Input a : $\delta_{DFA}(\{q_0, q_2\}, a) = \delta_{NFA}(q_0, a) \cup \delta_{NFA}(q_2, a) = \{q_1, q_2\} \cup \emptyset = \{q_1, q_2\}$
- Input b : $\delta_{DFA}(\{q_0, q_2\}, b) = \delta_{NFA}(q_0, b) \cup \delta_{NFA}(q_2, b) = \{q_2\} \cup \{q_0, q_2\} = \{q_0, q_2\}$

Dari state $\{q_1, q_2\}$:

- Input a : $\delta_{DFA}(\{q_1, q_2\}, a) = \delta_{NFA}(q_1, a) \cup \delta_{NFA}(q_2, a) = \{q_1\} \cup \emptyset = \{q_1\}$
- Input b : $\delta_{DFA}(\{q_1, q_2\}, b) = \delta_{NFA}(q_1, b) \cup \delta_{NFA}(q_2, b) = \{q_2\} \cup \{q_0, q_2\} = \{q_0, q_2\}$

Diagram Deterministic Finite Automata (DFA)