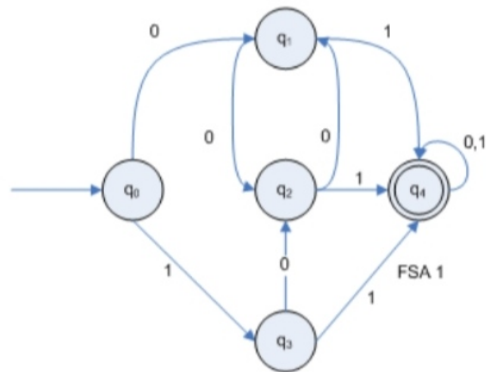


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- Tentukan pasangan mana yang distinguishable dan indistinguishable pada FSA 1



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Jawaban:

- $(q_0, q_1)$  distinguishable

$$\begin{aligned}\delta(q_0, 1) &= q_3 \\ \delta(q_1, 1) &= q_4 \\ \delta(q_0, 0) &= q_1 \\ \delta(q_1, 0) &= q_2\end{aligned}$$

- $(q_0, q_2)$  distinguishable

$$\begin{aligned}\delta(q_0, 1) &= q_3 \\ \delta(q_2, 1) &= q_4 \\ \delta(q_0, 0) &= q_1 \\ \delta(q_2, 0) &= q_1\end{aligned}$$

- $(q_0, q_3)$  distinguishable

$$\begin{aligned}\delta(q_0, 1) &= q_3 \\ \delta(q_3, 1) &= q_4 \\ \delta(q_0, 0) &= q_1 \\ \delta(q_3, 0) &= q_2\end{aligned}$$

- $(q_0, q_4)$  distinguishable

$$\begin{aligned}\delta(q_0, 1) &= q_3 \\ \delta(q_4, 1) &= q_4 \\ \delta(q_0, 0) &= q_1\end{aligned}$$

$$\delta(q_4, 0) = q_4$$

- $(q_1, q_2)$  indistinguishable

$$\begin{aligned}\delta(q_1, 1) &= q_4 \\ \delta(q_2, 1) &= q_4 \\ \delta(q_1, 0) &= q_2 \\ \delta(q_2, 0) &= q_1\end{aligned}$$

- $(q_1, q_3)$  indistinguishable

$$\begin{aligned}\delta(q_1, 1) &= q_4 \\ \delta(q_3, 1) &= q_4 \\ \delta(q_1, 0) &= q_2 \\ \delta(q_3, 0) &= q_2\end{aligned}$$

- $(q_1, q_4)$  distinguishable

$$\begin{aligned}\delta(q_1, 1) &= q_4 \\ \delta(q_4, 1) &= q_4 \\ \delta(q_1, 0) &= q_2 \\ \delta(q_4, 0) &= q_4\end{aligned}$$

- $(q_2, q_3)$  indistinguishable

$$\begin{aligned}\delta(q_2, 1) &= q_4 \\ \delta(q_3, 1) &= q_4 \\ \delta(q_2, 0) &= q_1 \\ \delta(q_3, 0) &= q_2\end{aligned}$$

- $(q_2, q_4)$  distinguishable

$$\begin{aligned}\delta(q_2, 1) &= q_4 \\ \delta(q_4, 1) &= q_4 \\ \delta(q_2, 0) &= q_1 \\ \delta(q_4, 0) &= q_4\end{aligned}$$

- $(q_3, q_4)$  distinguishable

$$\begin{aligned}\delta(q_3, 1) &= q_4 \\ \delta(q_4, 1) &= q_4 \\ \delta(q_3, 0) &= q_2 \\ \delta(q_4, 0) &= q_4\end{aligned}$$