

CSC341 Lab 7A

March 9, 2024

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Academic Honesty

Written Sources Used:

None

Help Obtained:

None

Question 1

1)

- a) \square
- b) 0,1
- c) 1,0

2)

- (2) either
- (3) δ_1
- (4) δ_0
- (5) either

3)

Yes

Question 2

$\delta_0 :$

$$\begin{aligned}(q_S, \triangleright, \triangleright) &\rightarrow \{(q_{scan}, \triangleright, \triangleright, R), (q_{scan}, \triangleright, \triangleright, R)\} \\ (q_{scan}, 0, \square) &\rightarrow \{(q_{scan}, 0, \square, R), (q_{scan}, 0, \square, R)\} \\ (q_{scan}, 1, \square) &\rightarrow \{(q_{scan}, 1, 0, R), (q_{scan}, 1, 1, R)\} \\ (q_{scan}, \square, \square) &\rightarrow \{(q_H, \square, \square, S)\}\end{aligned}$$

$\delta_1 :$

$$\begin{aligned}(q_S, \triangleright, \triangleright) &\rightarrow \{(q_{scan}, \triangleright, \triangleright, R), (q_{scan}, \triangleright, \triangleright, R)\} \\ (q_{scan}, 0, \square) &\rightarrow \{(q_{scan}, 0, \square, R), (q_{scan}, 0, \square, R)\} \\ (q_{scan}, 1, \square) &\rightarrow \{(q_{scan}, 1, 0, R), (q_{scan}, 1, 1, R)\} \\ (q_{scan}, \square, \square) &\rightarrow \{(q_H, \square, \square, S)\}\end{aligned}$$