Conversion - III

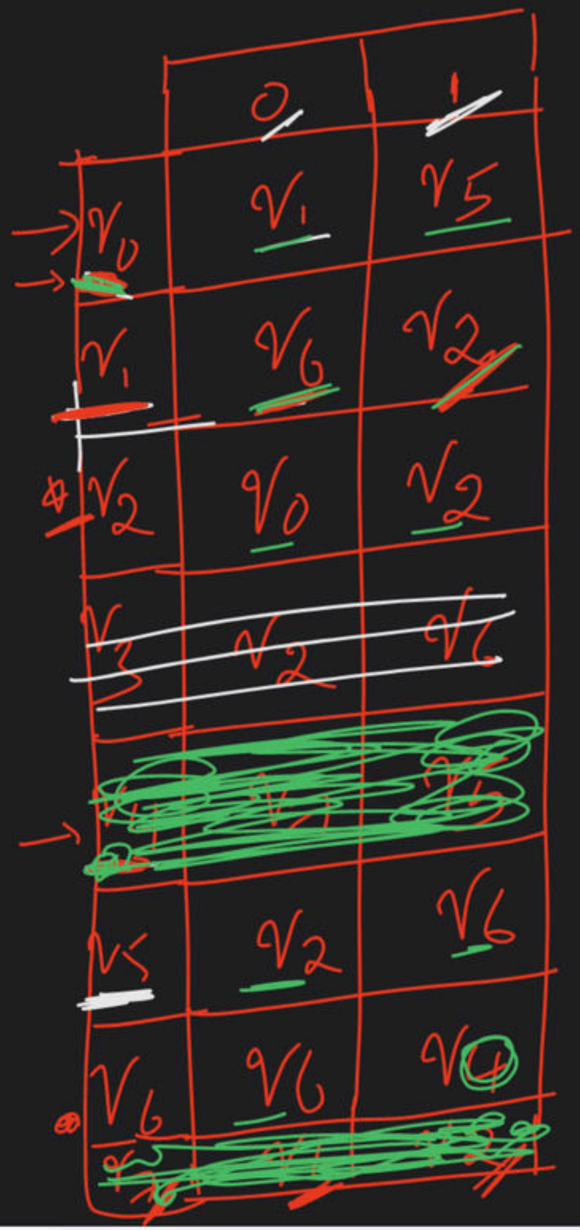
Complete Course on Theory of Computation

Subbarao Lingamgunta • Lesson 19 • Feb 28, 2022

Partition - Algo

(1) Not reachable state delete

(2) Partition algo (state equivalent)



$\pi_0 = (v_0, v_1, v_4, v_5, v_6, v_7)\ (v_2)$

Hotel Class

$\pi_1 = (v_0, v_4, v_6)\ (v_1\ v_7)\ (v_5)\ (v_2)$

Park Movies Canteen class

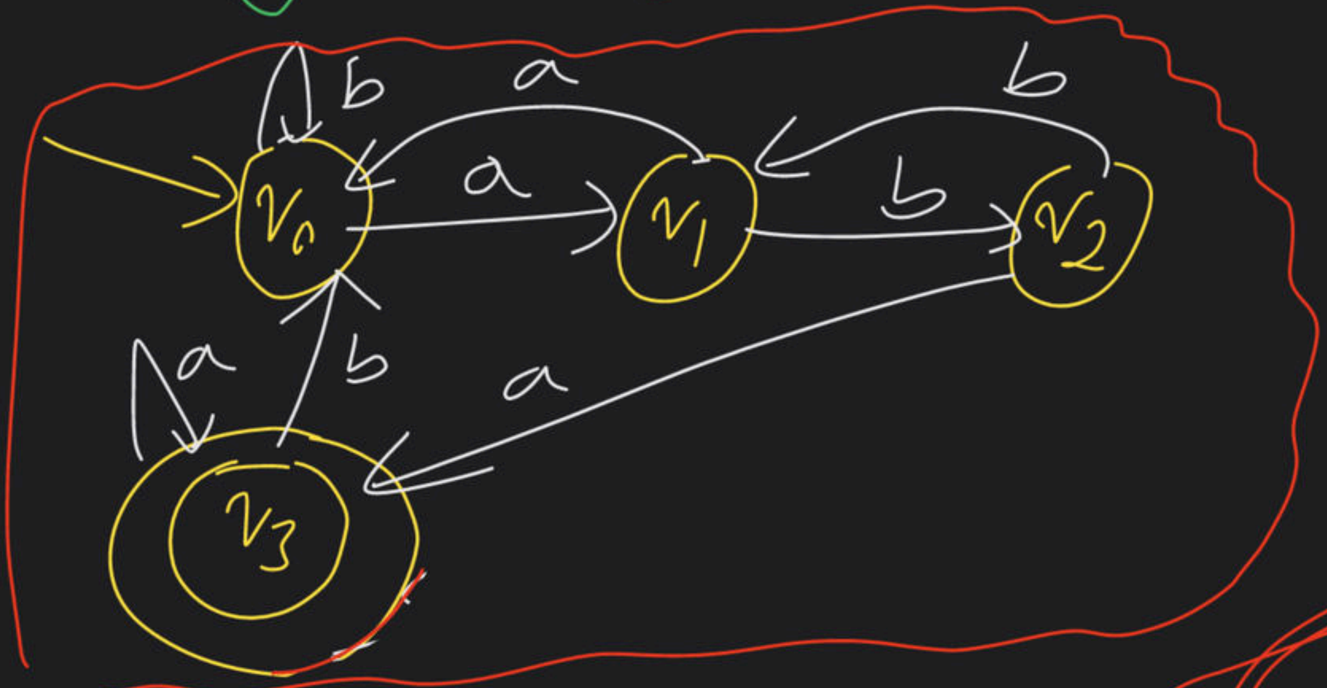
$\pi_2 = \underbrace{(v_0, v_4)}_{P_1}\ \underbrace{(v_6)}_{P_2}\ (v_1, v_7)\ (v_5)\ (v_2)$

$\pi_3 = (v_0, v_4)\ (v_6)\ (v_1, v_7)\ (v_5)\ (v_2)$

ex

	a	b
$\to q_0$	q_1	q_0
q_1	q_0	q_2
q_2	q_3	q_1
$*q_3$	q_3	q_0
~~q_4~~	~~q_3~~	~~q_5~~
~~q_5~~	~~q_6~~	~~q_4~~
~~q_6~~	~~q_5~~	~~q_6~~
~~q_7~~	~~q_6~~	~~q_3~~

① Not reachable from initial state delete :

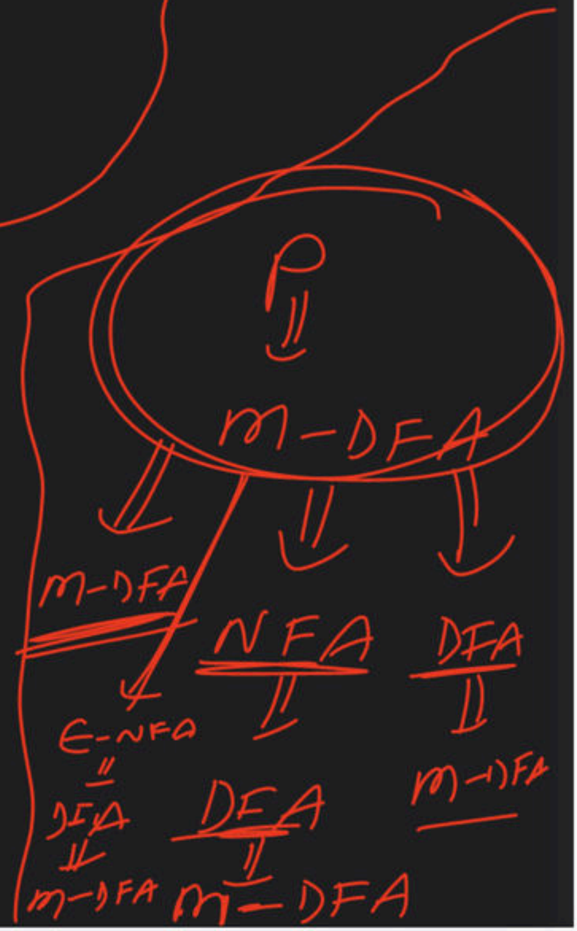


② Partition - Algo

$\pi_0 = (q_0\ q_1\ q_2)\ (q_3)$

$\pi_1 = (q_0, q_1)\ (q_2)\ (q_3)$

$\pi_2 = (q_0)\ (q_1)\ (q_2)\ (q_3)$



Note: If DFA contain n-state then equivalent NFA contain $\leq n$ state

Thanks All

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