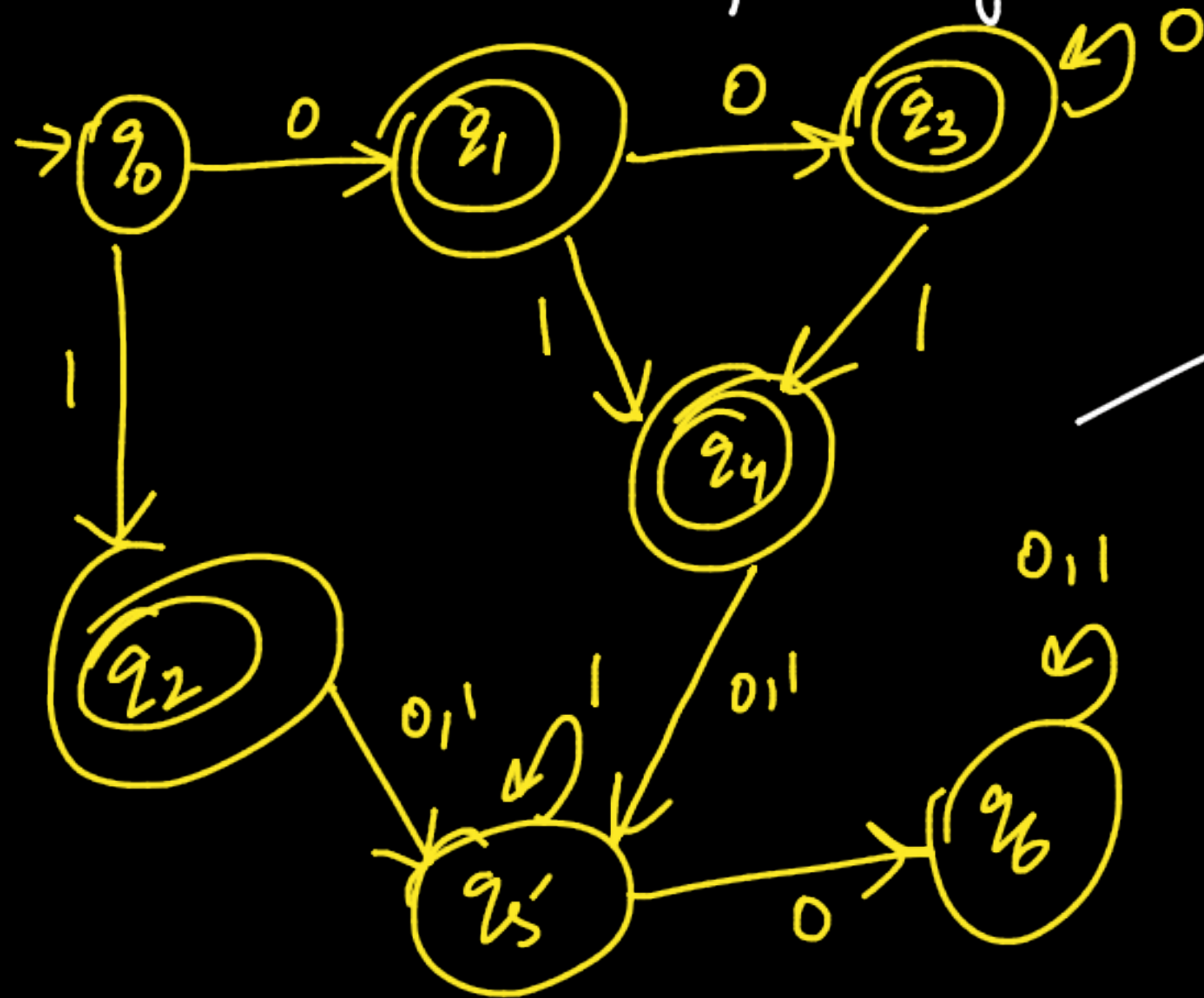


Date: Aug 28, 2020

4) Minimize the following DFA



Please complete the solution!

	0	1
→ q ₀	q ₁	q ₂
→ *q ₁	q ₃	q ₄
→ *q ₂	q ₅	q ₅
*q ₃	q ₃	q ₄
*q ₄	q ₅	q ₅
q ₅	q ₆	q ₅
q ₆	q ₆	q ₆

*q₁, *q₂ (Mark)

$\begin{matrix} 0 & 1 \\ q_3 & q_5 \end{matrix}$ (marked)
 $\begin{matrix} 0 & 1 \\ q_4 & q_5 \end{matrix}$ (marked)

AFL

(F, NF)

X - Cannot be merged

q ₁ *	X					
q ₂ *	X	X				
q ₃ *	X					
q ₄ *	X					
q ₅		X	X	X	X	
q ₆		X	X	X	X	
	q ₀	q ₁ *	q ₂ *	q ₃ *	q ₄ *	q ₅

$\begin{matrix} 0 & 1 \\ q_3 & q_5 \end{matrix}$ (marked)
 $\begin{matrix} 0 & 1 \\ q_4 & q_5 \end{matrix}$ (marked)
 \Rightarrow diff in terms of trans / diff in terms of set (F/NF)