

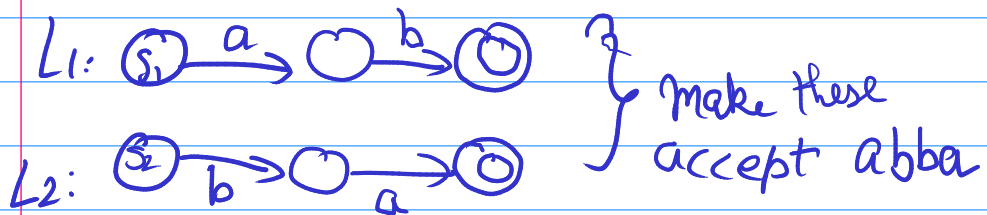
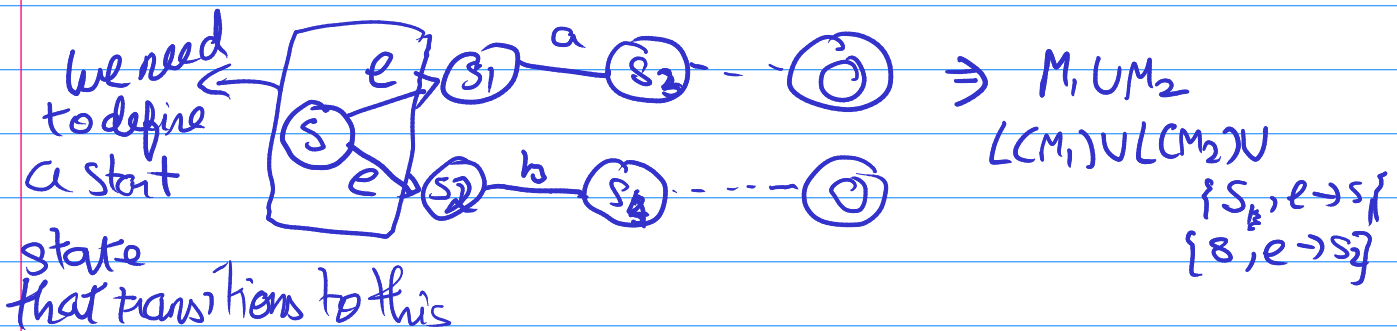
$$M_1 = (k_1, \Sigma, \Delta_1, s_1, F_1) \quad M_2 = (k_2, \Sigma, \Delta_2, s_2, F_2)$$

$$L(M) = L(M_1) \circ L(M_2) \quad M = (K, \Sigma, \Delta, s, F)$$

$$L = \{ab\}$$

$$= \{ba\}$$

$$L(M) = L = \{x \mid x \in \Sigma^* \text{ and } x = x_1 x_2 \left. \begin{array}{l} x_1 \in L_1 \\ x_2 \in L_2 \end{array} \right\}$$



\Rightarrow final state of L_1 $\{f, e \rightarrow s_2\}$

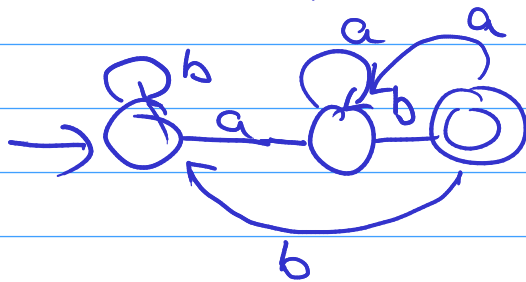
$$L = \{ab, aa\}$$

$$L^* = \{ \epsilon, a, b, ab, ba, aab, aba, bba, abb, \dots \}$$



to make L^* , just make f_i transition with null to s_1 , and make s_1 the final state

$L = \{w \in \Sigma^* \mid w \text{ ends with } ab\}$



\bar{L} (Only on DFA)

Construct \bar{M} for $L \rightarrow$ then toggle final & initial states

