

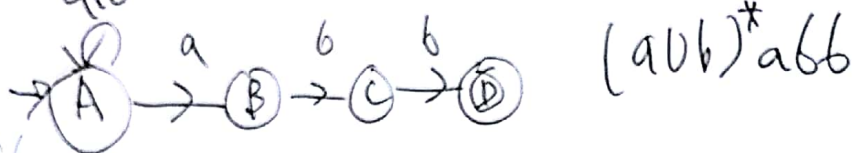
R.E $\hat{=}$ R.L.

f a \leftrightarrow x.g

R.E $\xrightarrow{\text{easy}}$ f a f i g \rightarrow Eij k

F.A \rightarrow R.E $\hat{=}$ Σ 가는 4(10?) \cup \cup

F.A. — n개의 eq with n-variables (state)



nfa

$$\begin{cases} A = aA + bA + aB = (a+b)A + aB \\ B = bC = bb \\ C = bD, = b \cdot \epsilon = b \\ D = \epsilon \end{cases}$$

$$A \neq \frac{a b b}{1 - (a+b)}$$

$$= \frac{1}{1 - (a+b)} a b b$$

$$A = aA + bA + aB \Rightarrow [1 + (a+b) + (a+b)^2 + \dots] a b b$$

$$\begin{aligned} A &\Rightarrow \beta \\ A &\Rightarrow aA \Rightarrow a\beta \\ A &\Rightarrow a^m A = a^m \beta \\ &\vdots \end{aligned}$$

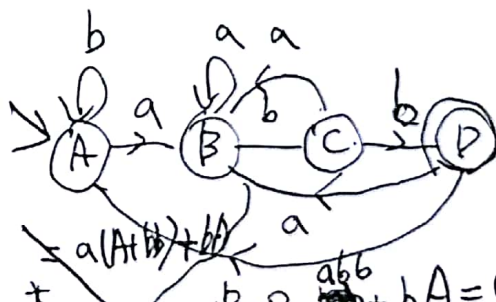
$$\neq (a+b)^* a b b$$

subset construction

dfa	a	b
{A}	{A, B}	{A}
{A, B}	{A, B}	{A, C}
{A, C}	{A, B}	{A, D}
{A, D}	{A, B}	{A}

$$A = a^* \beta$$

renams	a	b
A	B	A
B	B	C
C	B	D
D	B	A



$$A = aB + bA \quad (L) \dots (-) \dots = aB + bA + bA = (a+b)A + bA$$

$$B = aB + bC \quad ()^* () = aB + bA + bb = A + bb = (a+b)A + bb$$

$$C = aB + bD = aB + b(A + \epsilon) = aB + bA + b = A + b$$

$$D = aB + bA + \epsilon = A + \epsilon$$

nfa

\rightarrow dfa $\Sigma^2 \Sigma^2 \Sigma^2 \dots \Sigma^2$

$$W = a_1 a_2 \dots a_n$$

$$\delta_{a^n} = \delta_{a_1} \delta_{a_2} \dots \delta_{a_n} = \delta_{a_1}^* \delta_{a_2}^* \delta_{a_3}^* \dots \delta_{a_n}^*$$

$$\text{if } \delta_{a_n} \delta_{a_1}^* = \delta_{a_1}$$

$$\delta_{a_1}^* \delta_{a_1} \delta_{a_2}^* = \delta_{a_1}^* \delta_{a_2}^* \dots \delta_{a_n}^*$$