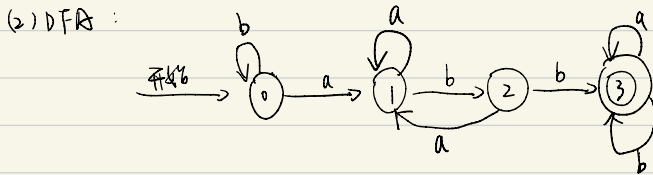
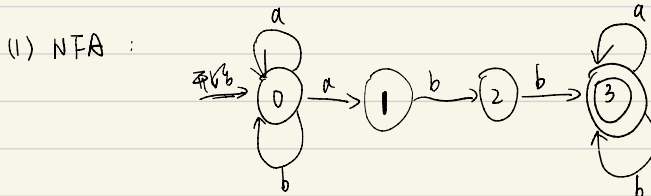


教材 2.7(d)

为下列正规式手工构造NFA和DFA, 再用算法将NFA变换成DFA并构造最简的DFA  
 $(alb)^*abb(alb)^*$

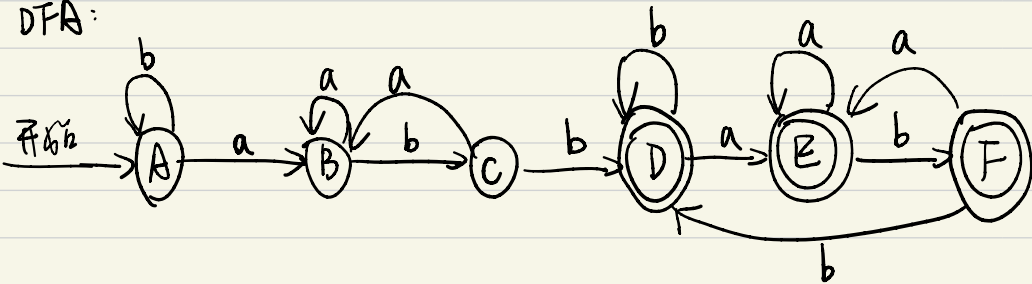


(3)

$A = \{0\}$   
 $B = \{0, 1\}$   
 $C = \{0, 2\}$   
 $D = \{0, 3\}$   
 $E = \{0, 1, 3\}$   
 $F = \{0, 2, 3\}$

状态	输入符号	
	a	b
A	B	A
B	B	C
C	B	D
D	E	D
E	E	F
F	E	D

DFA:



(4) 构造DFA:

① 按是否为接受状态分:  $\{A, B, C\}$ ,  $\{D, E, F\}$

$$\text{move}(\{A, B, C\}, a) = \{B\}$$

$$\text{move}(\{A, B, C\}, b) = \{A, C, D\}$$

② 按是否可区分

$\therefore$  分为  $\{A, B\}$ ,  $\{C\}$ ,  $\{D, E, F\}$

$$\text{move}(\{A, B\}, a) = \{B\}$$

$$\text{move}(\{A, B\}, b) = \{A, C\}$$

状态	输入符号	
	a	b
A	B	A
B	B	C
C	B	D
D	E	D
E	E	F
F	E	D

③ 其中存在两个状态

分为  $\{A\}$ ,  $\{B\}$ ,  $\{C\}$ ,  $\{D, E, F\}$

