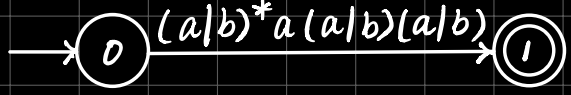
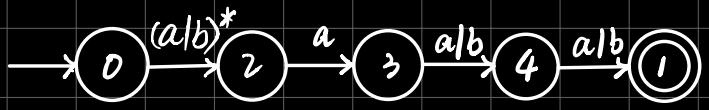
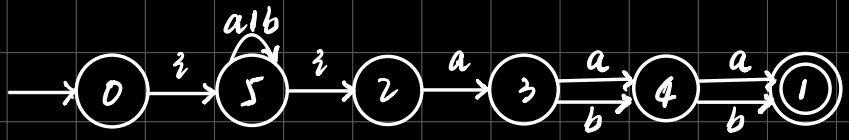
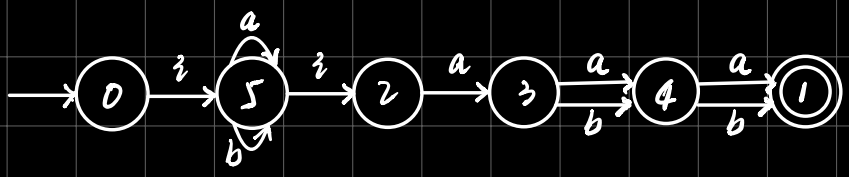
5120180269 李若昊 计科1803









(最终NFA)

由上图，ε-closure{0} = {0, 5, 2}

J	J_a	J_b
ε-closure{0}	{5, 2, 3}	{5, 2}
{5, 2, 3}	{5, 2, 3, 4}	{5, 2, 4}
{5, 2}	{5, 2, 3}	{5, 2}
{5, 2, 3, 4}	{5, 2, 3, 4, 1}	{5, 2, 4, 1}
{5, 2, 4}	{5, 2, 3, 1}	{5, 2, 1}
{5, 2, 4, 3, 1}	{5, 2, 3, 4, 1}	{5, 2, 4, 1}
{5, 2, 4, 1}	{5, 2, 3, 1}	{5, 2, 1}
{5, 2, 3, 1}	{5, 2, 3, 4}	{5, 2, 4}
{5, 2, 1}	{5, 2, 3}	{5, 2}

对以上表格每个集合分配一个状态：

J	J_a	J_b
1	2	3
2	4	5
3	2	3
4	6	7
5	8	9
6	6	7
7	8	9
8	4	5
9	2	3

先将如上定义的状态集划成终态集S_1和非终态集S_2

$S_1=\{1,2,3,4,5\}$，$S_2=\{6,7,8,9\}$

∵ $\delta(1,a)=2$，$\delta(4,a)=6$

$\delta(2,a)=4$，$\delta(5,a)=8$

$\delta(3,a)=2$

∴ S_1可细分为$S_3=\{1,3\}$，$S_4=\{2\}$，$S_5=\{4\}$，$S_6=\{5\}$

同理，S_2分为$S_7=\{6\}$，$S_8=\{7\}$，$S_9=\{8\}$，$S_{10}=\{9\}$

DFA: