Assignment 3

3.6.5

练习3.6.5：给出如下NFA的转换表

1）练习3.6.3中的NFA

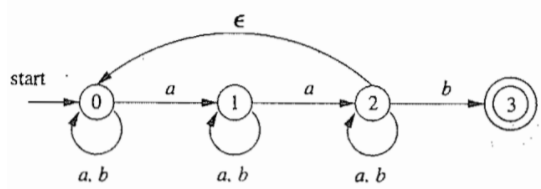


图 3-29　练习 3. 6. 3 的 NFA

2)练习3.6.4中的NFA

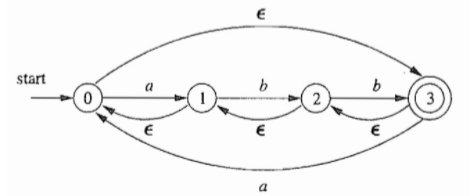
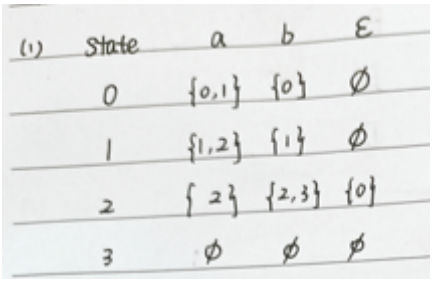
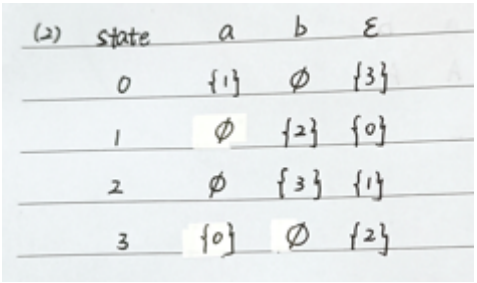


图 3-30　练习 3. 6. 4 的 NFA

1)



2)



3.7.1

练习3.7.1：将下列图中的NFA转换为DFA（**简要描述中间过程**）

1）图3-26

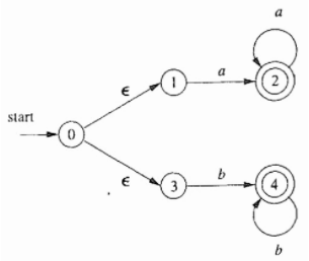
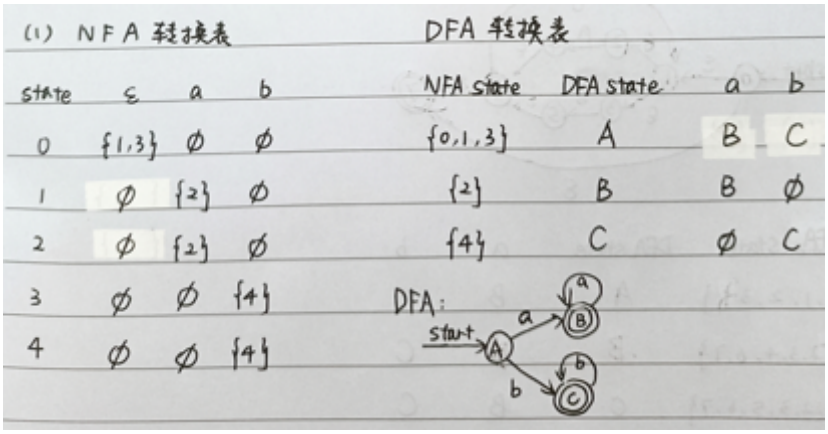


图 3-26　接受 aa*|bb* 的 NFA

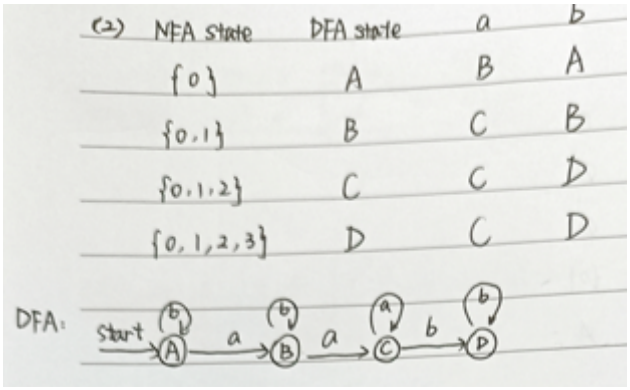
2）图3-29

3）图3-30

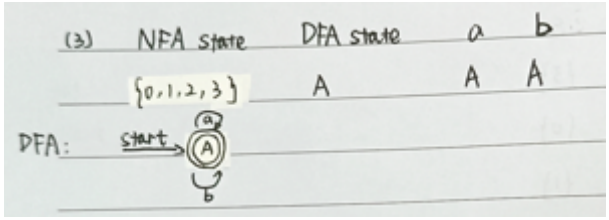
1)



2)



3)



3.7.3

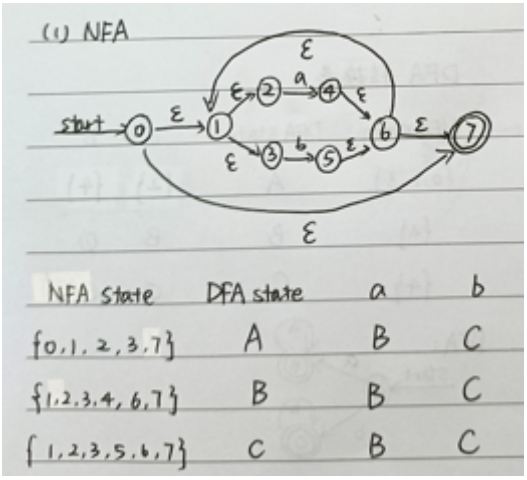
练习3.7.3：使用算法3.23和3.20将下列正则表达式转换成DFA（**简要描述中间过程**）

1）(a|b)*

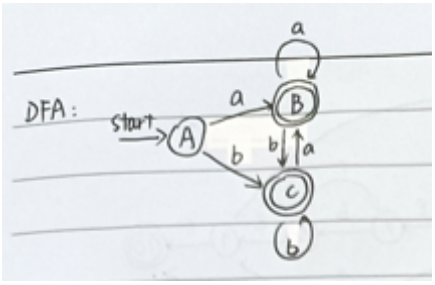
2）(a*|b*)*

3）((ε|a)b*)*

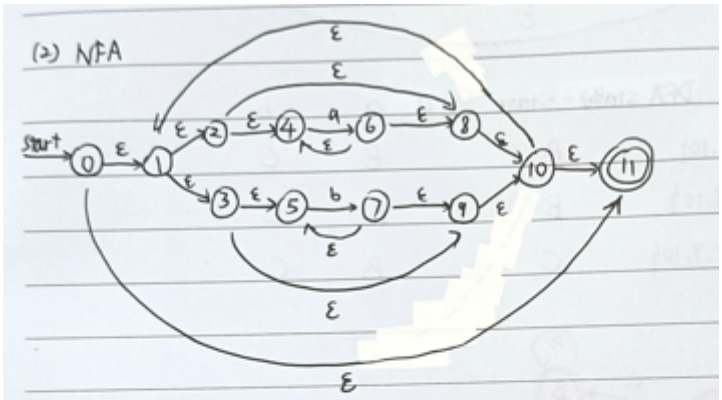
1)



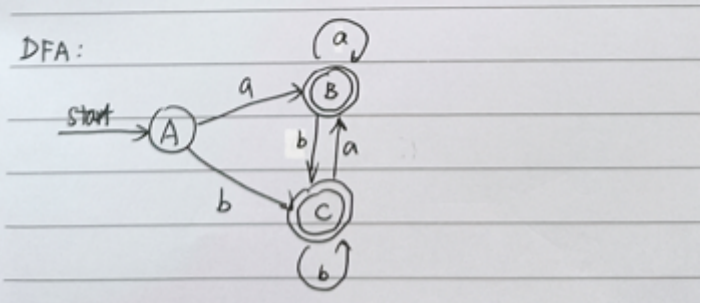
NFA state	DFA state	a	b
{0, 1, 2, 3, 7}	A	B	C
{1, 2, 3, 4, 6, 7}	B	B	C
{1, 2, 3, 5, 6, 7}	C	B	C



2)

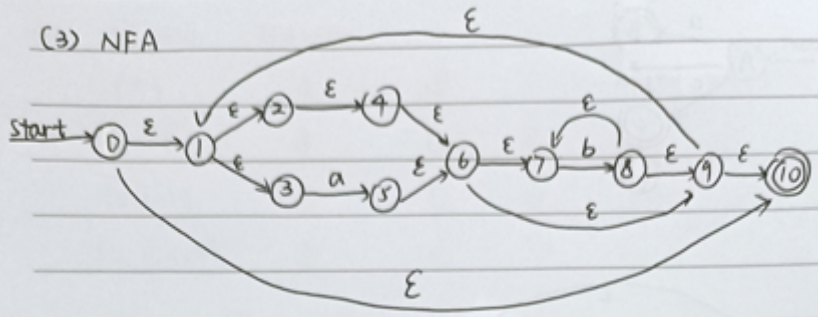


NFA state	DFA state	a	b
{0, 1, 2, 3, 4, 5, 8, 9, 10, 11}	A	B	C
{1, 2, 3, 4, 5, 6, 8, 9, 10, 11}	B	B	C
{1, 2, 3, 4, 5, 7, 8, 9, 10, 11}	C	B	C



3)

(3) NFA



NFA state	DFA state	a	b
{0,1,2,3,4,6,7,9,10}	A	B	C
{1,2,3,4,5,6,7,9,10}	B	B	C
{1,2,3,4,6,7,8,9,10}	C	B	C

DFA: