

编译原理 - 作业(1) : 词法分析

Exerc 3.1.2

text: 标签间文本 Here is a photo of, my house, See. More ^{Pictures} pictures. if you liked that one.

start tag: 开始标签 , <P>, ,
, <A>

End tag: 结束标签 , .

attribute: 标签内参数 SRC, HREF

value: 标签内参数值 "house.gif", "morePix.html".

assign-op: 赋值符号 =

Exerc 3.3.5

b) $a^*b^*c^*d^*e^* \dots v^*w^*x^*y^*z^*$

c) 使用 a 表示除 3*, "与 / 之外的符号, 0 表示 *.

$10(0^*(a|'|'|o|'|')|/)^*0+/$

h) $b^*(a|ab)^*$

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c) 使用 a 表示除 3*, "与 / 之外的符号, 0 表示 *.

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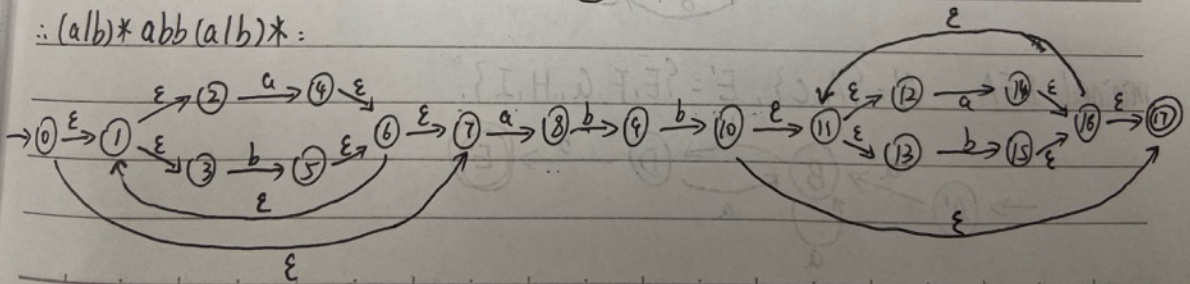
h) $b^*(a|ab)^*$

Exerc 3.7.3

step 1: $(ab)^* \rightarrow (ab)^*$: $\rightarrow 0 \xrightarrow{\epsilon} 1 \xrightarrow{\epsilon} 2 \xrightarrow{a} 4 \xrightarrow{\epsilon} 6 \xrightarrow{\epsilon} 7$

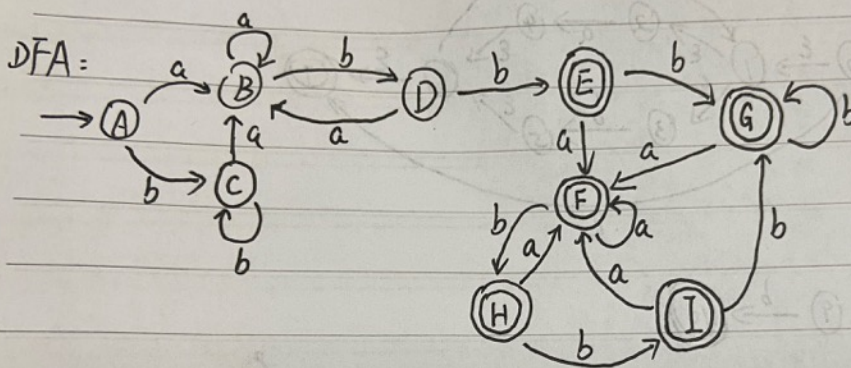
$abb = \rightarrow 7 \xrightarrow{a} 8 \xrightarrow{b} 9 \xrightarrow{b} 10$

$\therefore (ab)^*abb(ab)^*$:



NFA \rightarrow DFA

NFA state	DFA state	a	b
$\{0, 1, 2, 3, 7\}$	A	B	C
$\{1, 2, 3, 4, 6, 7, 8\}$	B	B	D
$\{1, 2, 3, 5, 6, 7\}$	C	B	C
$\{1, 2, 3, 5, 6, 7, 9\}$	D	B	E
$\{1, 2, 3, 5, 6, 7, 10, 11, 12, 13, 17\}$	E	F	G
$\{12, 13, 17\}$			
$\{1, 2, 3, 4, 6, 7, 8, 11\}$	F	F	H
$\{12, 13, 14, 16, 17\}$			
$\{1, 2, 3, 5, 6, 7, 11, 12\}$	G	F	G
$\{13, 15, 16, 17\}$			
$\{1, 2, 3, 5, 6, 7, 9, 11\}$	H	F	I
$\{12, 13, 15, 16, 17\}$			
$\{1, 2, 3, 5, 6, 7, 10\}$	I	F	G
$\{11, 12, 13, 15, 16, 17\}$			



minimal DFA: $A' = \{A, C\}$, $E' = \{E, F, G, H, I\}$.

