

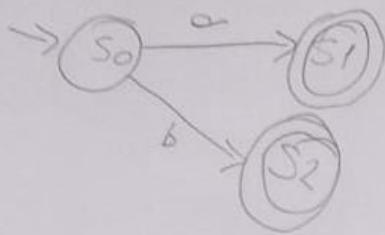
**UNIVERSIDADE FEDERAL DE RORAIMA**  
**DISCIPLINA CONSTRUÇÃO DE COMPILADORES**  
**PROF.: DR. LUCIANO FERREIRA**  
**ALUNO: FELIPE DERKIAN DE SOUSA FREITAS**

# LISTA 3

**BOA VISTA, 03 DE OUTUBRO DE 2020**

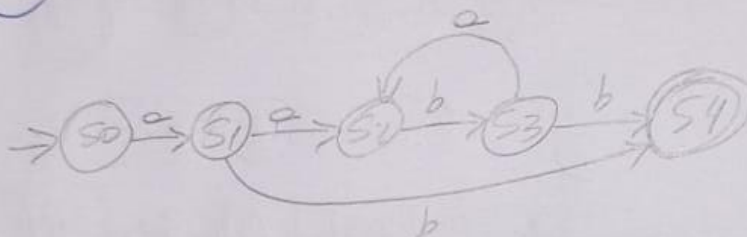
# Lista 3 - Compiladores - Felipe's Version

3.1

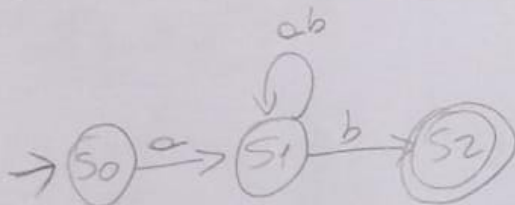


X	S0	S1	S2
a	S1	—	—
b	S2	—	—

3.2  $a(ab)^*b$

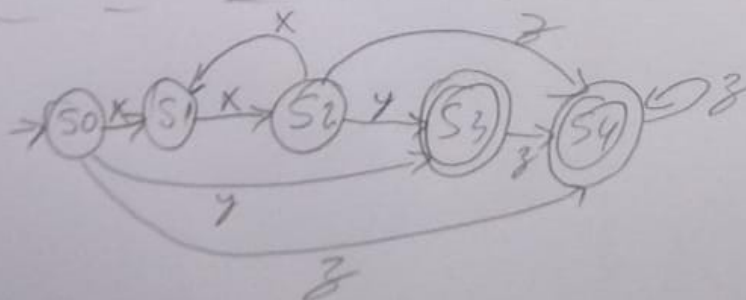
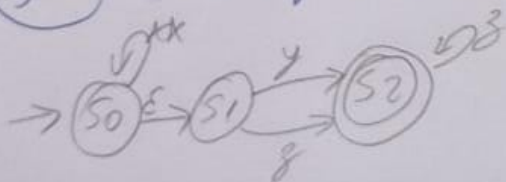


ab  
aabb  
aabobbb



3.3  $(xx)^*(y|z)z^*$

y, z, xx y z z, ...

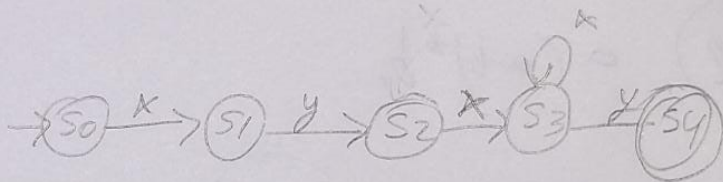


3.4  $G = \{V_n, V_t, P, A\}$ ,  $V_n = \{A, B, C\}$ ,  $V_t = \{x, y\}$

$P = \{A \rightarrow xB,$   
 $A \rightarrow yB,$   
 $B \rightarrow xC,$   
 $C \rightarrow xC,$   
 $C \rightarrow y\}$

$xB$   
 $xyB$   
 $xyxC$   
 $xyxy$   
 $\underline{\underline{=}}$

$xB$   
 $xyB$   
 $xyxC$   
 $xyxxC$   
 $xyxxxxy$   
 $\underline{\underline{=}}$



$G = (\{s_0 \dots s_4\}, \{x, y\}, \{A\}, s_0, \{s_4\})$

$Q(s_0, x) = s_1$

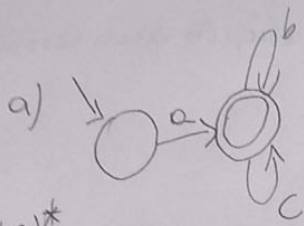
$Q(s_1, y) = s_2$

$Q(s_2, x) = s_3$

$Q(s_3, x) = s_3$

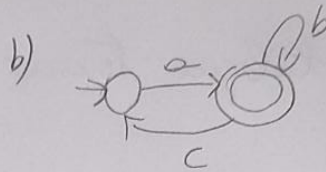
$Q(s_3, y) = s_4$

3.5



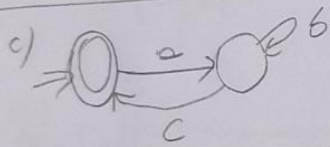
$a(blc)^*$

$a,$   
 $ab,$   
 $abc,$   
 $abbb...,$   
 $abbbcccbb...,$



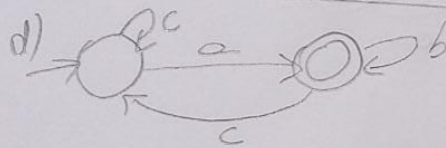
$a,$   
 $ab,$   
 $acab,$   
 $acabb,$   
 $abbbcca$

$(ab^*cb^*)^+$



$(a^*bc)^*$

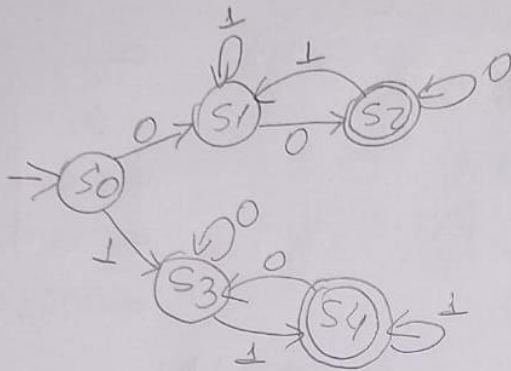
$\epsilon,$   
 $ac,$   
 $acabc,$   
 $acabbbc,$   
 $\dots$



$(c^*ac^*b^*c^*)^+$

$caa$   
 $caabb$   
 $a$   
 $acacacab$

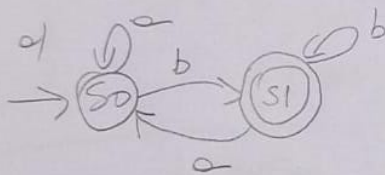
3.6)  $\{0,1\}$  tal que termine com o dígito que começa.



Teste

0110110  
01010100010  
1001001  
1010100011

3.7)  $(a^*b)^+$



ab  
bbab  
aaaabaaab

3.8)  $a) [0[1]^+]$  EX: 01, 0111, 01101, ...

b)  $[1-9][0-9]^*[1][1-9][0-9]^*$

EX: 30,1 ; 30,10 ; ...

(3.9)

%.%

1)  $0[01]\{2\}0$

2)  $\perp(0\{2\} \mid 1\{2\})[01]$

a)  $0000 (\perp)$

d)  $0010 (\perp)$

a)  $1020 (X)$

b)  $0120 (X)$

e)  $0210 (X)$

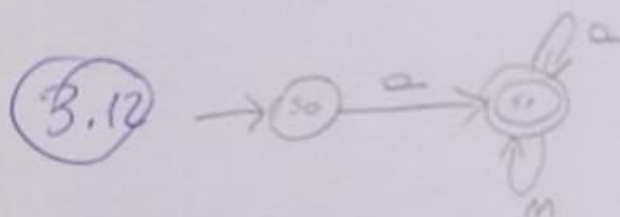
i)  $1111 (2)$

c)  $000\perp (X)$

f)  $1000 (2)$

j)  $100110 (2)$

g)  $1010 (X)$



a)  $a(a|m)^*$

b)

X	s0	s1
a	s1	s1
m	-	s1

c)  $a, aa, aaa, am, aam, aamm, \dots$

