

Programming Languages and Compilers: Quiz #4

Due on April 18, 2024 at 3:10pm

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Problem 1

Show the process of button-up parsing for parsing for a b c d \$

1. $\text{Start} \rightarrow S\$$ (1)
2. $S \rightarrow AC$ (2)
3. $C \rightarrow c$ (3)
4. $\mid \lambda$ (4)
5. $A \rightarrow aBCd$ (5)
6. $\mid BQ$ (6)
7. $B \rightarrow bB$ (7)
8. $\mid \lambda$ (8)
9. $Q \rightarrow q$ (9)
10. $\mid \lambda$ (10)

State	a	b	c	d	q	\$	Start	S	A	B	C	Q
0	3	2	8		8	8	accept	4	1	5		
1			11			4					14	
2		2	8	8	8	8				13		
3		2	8	8						9		
4						8						
5			10		7	10						6
6			6			6						
7			9			9						
8						1						
9			11	4							10	
10				12								
11				3		3						
12			5			5						
13			7	7	7	7						
14						2						

Figure 1: Parse Table

Solution

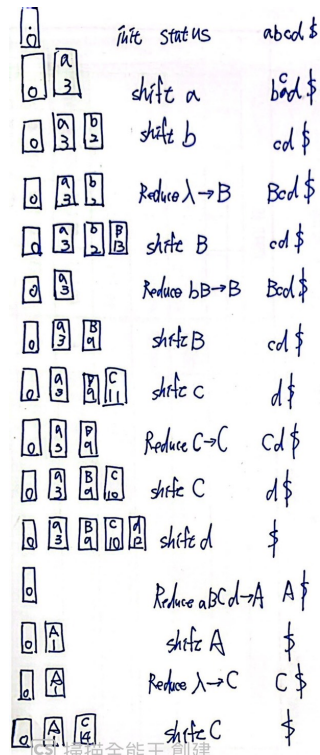


Figure 2: Status

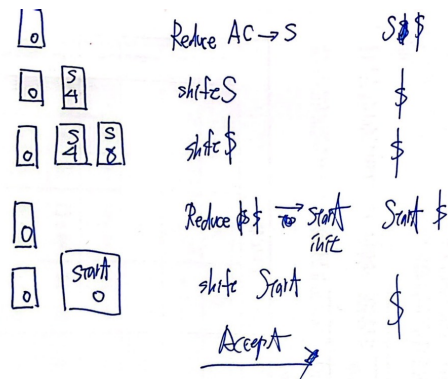


Figure 3: Status