编译原理 第二次理论作业

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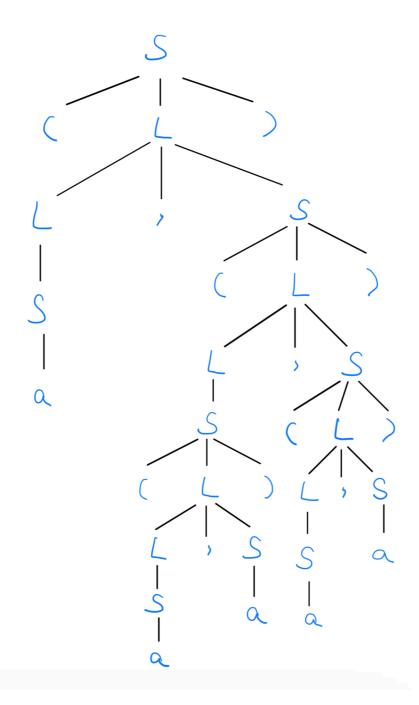
Exercise 2.1

Given the following grammar:

$$S \rightarrow (L) \mid a$$

$$L \rightarrow L$$
, $S \mid S$

Construct a parse tree for the sentence



Exercise 2.2

Given the following grammar:

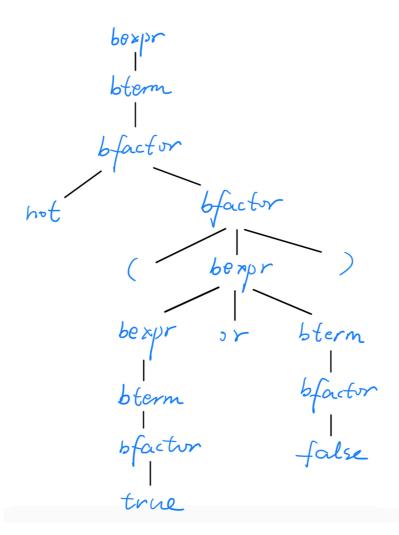
 $\mathsf{bexpr} \to \mathsf{bexpr} \; \mathbf{or} \; \mathsf{bterm} \; | \; \mathsf{bterm}$

 $bterm \rightarrow bterm \; \textbf{and} \; bfactor \; | \; bfactor \;$

 $\mathsf{bfactor} \to \mathbf{not} \; \mathsf{bfactor} \; | \; \mathsf{(bexpr)} \; | \; \mathsf{true} \; | \; \mathsf{false}$

Construct a parse tree for the sentence

not (true or false)



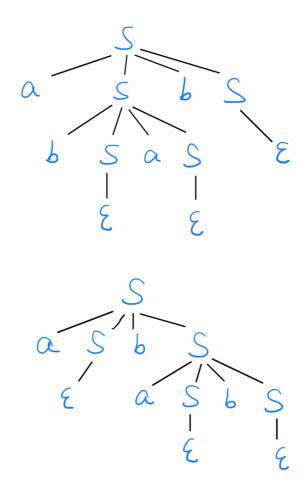
Exercise 2.3

Is the grammar:

 $S \rightarrow aS b S | b S aS | \epsilon$

ambiguous? Why?

如下图,



对于abab有两种语法树,所以是具有二义性的。