

## Exercise 2.1

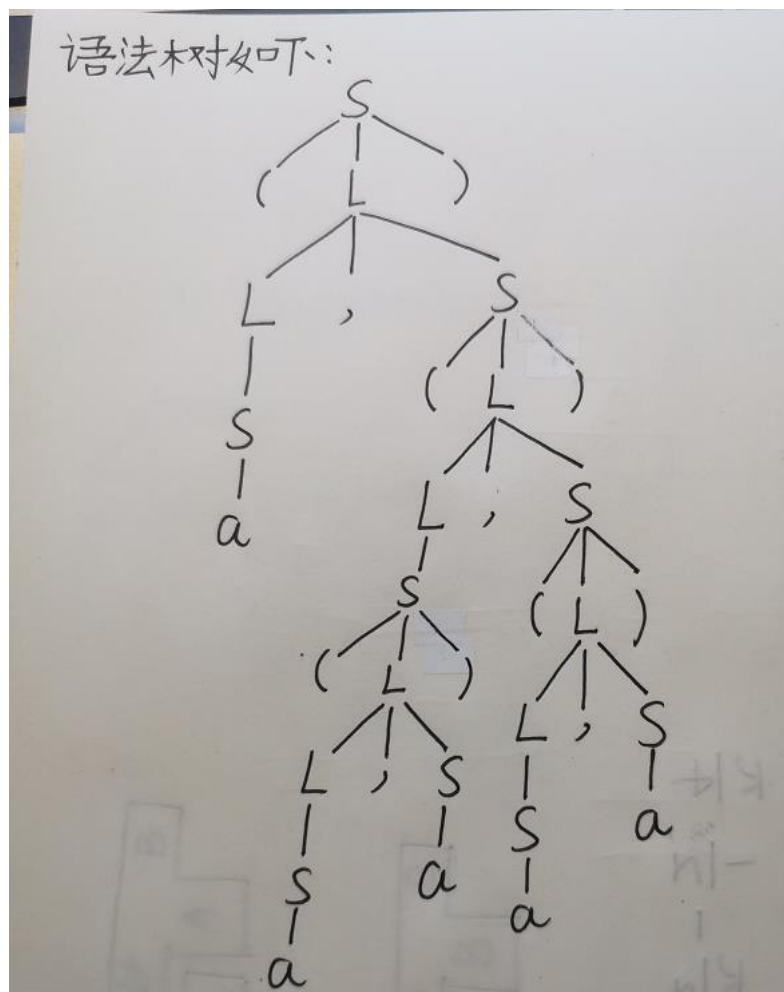
- Given the following grammar:

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

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

Construct a parse tree for the sentence  
**(a, ((a, a), (a, a)))**

答:



## Exercise 2.2

- Given the following grammar:

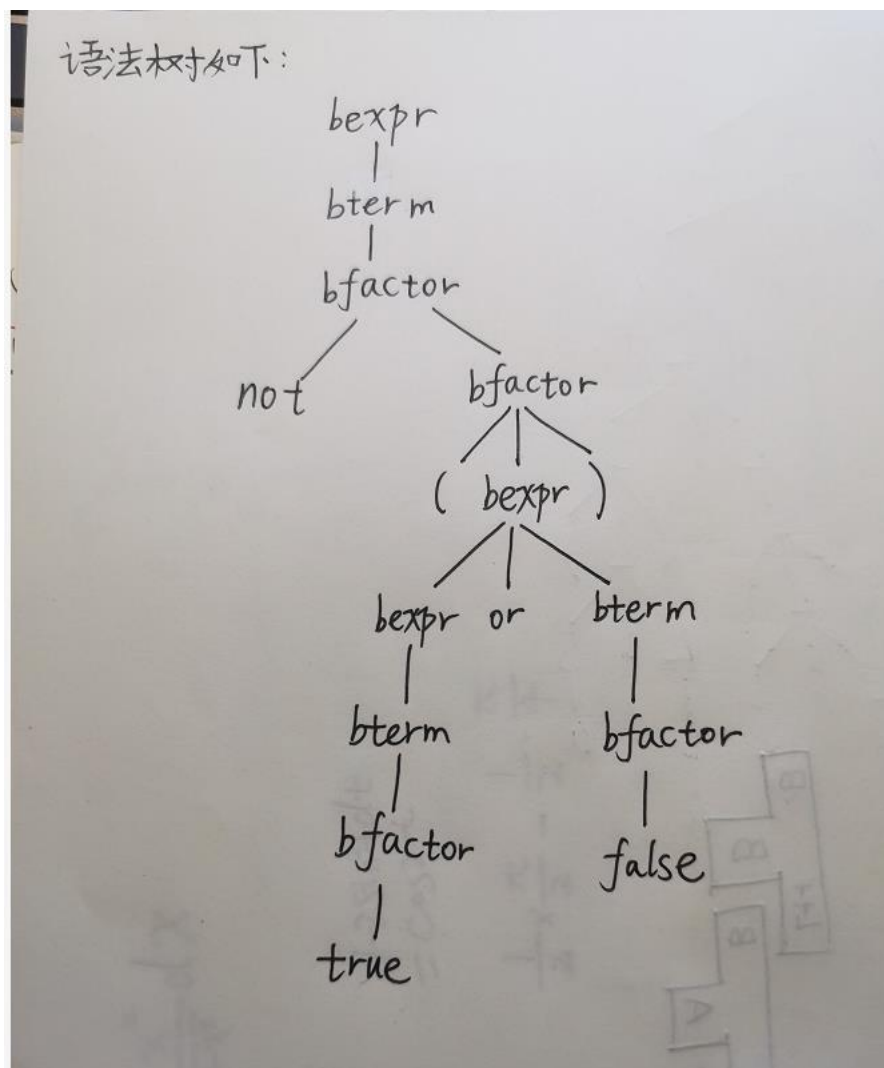
$\text{bexpr} \rightarrow \text{bexpr } \mathbf{or} \text{ bterm} \mid \text{bterm}$

$\text{bterm} \rightarrow \text{bterm } \mathbf{and} \text{ bfactor} \mid \text{bfactor}$

$\text{bfactor} \rightarrow \mathbf{not} \text{ bfactor} \mid ( \text{bexpr} ) \mid \mathbf{true} \mid \mathbf{false}$

Construct a parse tree for the sentence  
**not (true or false)**

答:



## Exercise 2.3

○ Is the grammar:

$S \rightarrow a S b S \mid b S a S \mid \varepsilon$   
ambiguous? Why?

答:

