

SYNTAX GRAPHS FOR EXAMPLE 3.1

The FIRST condition for an LL grammar is violated by the RHS rules for $\langle \text{stmt_list} \rangle$ and $\langle \text{expression} \rangle$ in Example 3.1. An LL grammar can be obtained by left-factoring these rules and replacing the right recursion in $\langle \text{stmt_list} \rangle$ with repetition. Using EBNF, the modified rules for Example 3.1 are:

```
<program>    begin <stmt_list> end  
<stmt_list>  <stmt> { ; <stmt> }  
<stmt>      <var> = <expression>  
<var>       A | B | C  
<expression> <var> [ ( + | - ) <var> ]
```

The corresponding syntax graphs are shown below:

