```
1: function ForwardSubstitution()
2:     impose an order on the nonterminals, $A_1, A_2, \cdots, A_n$
3:     for $i \leftarrow 1$ to $n$ do
4:         for $j \leftarrow 1$ to $i - 1$ do
5:             if $\exists$ a production $A_i \rightarrow A_j \gamma$ then
6:                 replace $A_i \rightarrow A_j \gamma$ with one or more productions that expand $A_j$
7:             end if
8:             rewrite the productions to eliminate any direct left recursion on $A_i$
9:         end for
10:    end for
11: end function
```