Rules for Generating First and Follow Sets

A. For each rule of the form
   a. $<nt_i>$ → T_k …
   b. T_k is included in the first set of $<nt_i>$

B. For each rule of the form
   a. $<nt_i>$ → $<nt_j>$ …
   b. if T_k is a member of the first set of $<nt_j>$ then T_k is included in the first set of $<nt_i>$

C. For each rule of the form
   a. $<nt_i>$ → λ
   b. if T_k is a member of the follow set of $<nt_i>$ then T_k is included in the first set of $<nt_i>$

D. For each rule of the form
   a. < > → … $<nt_i>$ T_k …
   b. T_k is included in the follow set of $<nt_i>$

E. For each rule of the form
   a. < > → … $<nt_i>$ $<nt_j>$ …
   b. if T_k is a member of the first set of $<nt_j>$ then T_k is included in the follow set of $<nt_i>$

F. For each rule of the form
   a. $<nt_i>$ → … $<nt_j>$
   b. if T_k is a member of the follow set of $<nt_i>$ then T_k is included in the follow set of $<nt_j>$

P =

{

1. <program> → **begin** <stmt_list> **end**
2. <stmt_list> → <stmt> <stmt_tail>
3. <stmt_tail> → **;** <stmt_list>
4. <stmt_tail> → λ
5. <stmt> → <var> = <expression>
6. <var> → **A**
7. <var> → **B**
8. <var> → **C**
9. <expression> → <var><expr_tail>
10. <expr_tail> → + <var><expr_tail>
11. <expr_tail> → * <var><expr_tail>
12. <expr_tail> → λ

}