First and Follow Sets after left factoring

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| Production | First | Follow |
| 1. program | {**program**} | {**$**} |
| 1.1 program1 | {**var**, **function**, **begin**} | {**$**} |
| 1.1 program1\_1 | {**function**, **begin**} | {**$**} |
| 2. identifier\_list | {**id**} | {)} |
| 2.1 identifier\_list1 | {**,** , **epsilon** } | {)} |
| 3. declarations | {**var**} | {**function**, **begin**} |
| 3.1 declarations1 | {**var**, **epsilon**} | {**function**, **begin**} |
| 4. type | {**integer**, **real**, **array**} | {**;** , )} |
| 5. standard\_type | {**integer**, **real**} | {**;** , )} |
| 6. subprogram\_declarations | {**function**} | {**begin**} |
| 6.1 subprogram\_declarations1 | {**function**, **epsilon**} | {**begin**} |
| 7. subprogram\_declaration | {**function**} | {**;**} |
| 7.1 subprogram\_declaration1 | {**var**, **function**, **begin**} | {**;**} |
| 7.1.1 subprogram\_declaration1\_1 | {**function**, **begin**} | {**;**} |
| 8. subprogram\_head | {**function**} | {**var**, **function**, **begin**} |
| 8.1 subprogram\_head1 | {(, :} | {**var**} |
| 9. parameter\_list | {**id**} | {)} |
| 9.1 parameter\_list1 | {**;** , **epsilon**} | {)} |
| 10. compound\_statement | {**begin**} | {**.** , **;** , **else**, **end**} |
| 10.1 compound\_statement1 | {**id**, **begin**, **if**, **while**} | {**.** , **;** , **else**, **end**} |
| 11. statement\_list | {**id**, **begin**, **if**, **while**} | {**end**} |
| 11.1 statement\_list1 | {**;** , **epsilon**} | {**end**} |
| 12. statement | {**id**, **begin**, **if**, **while**} | {**;** , **else**, **end**} |
| 12.1 statement1 | {**else**, **epsilon**} | {**;** , **else**, **end**} |
| 13. variable | {**id**} | {**assignop**} |
| 13.1 variable1 | {**[** , **epsilon**} | {**assignop**, **multop**, **addop**, **relop**, **else**, **end**, **then**, **do**, **]**, **,**, **)**, **;**} |
| 14. expression\_list | {**id**, **num**, (, **not** , **+**, **-**} | {)} |
| 14.1 expression\_list1 | {**,** , **epsilon**} | {)} |
| 15. expression | {**id**, **num**, (, **not** , **+**, **-**} | {**else**, **end**, **then**, **do**, **]**, **,** , **)**, **;**} |
| 15.1 expression1 | {**relop**, **epsilon**} | {**;** , **else**, **end**, **then**, **do**, **]**, **,**, **)**} |
| 16. simple\_expression | {**id**, **num**, (, **not** , **+**, **-**} | {**relop**, **;** , **else**, **end,** **then**, **do**, **]**, **,**, **)**} |
| 16.1 simple\_expression1 | {**addop**, **epsilon**} | {**relop**, **;** , **else**, **end**, **then**, **do**, **]**, **,**, **)**} |
| 17. term | {**id**, **num**, (, **not** } | {**addop**, **relop**, **;** , **else**, **end**, **then**, **do**, **]**, **,**, **)**} |
| 17. term1 | {**multop**, **epsilon**} | {**addop**, **relop**, **;** , **else**, **end**, **then**, **do**, **]**, **,**, **)**} |
| 18. factor | {**id**, **num**, (, **not** } | {**multop**, **addop**, **relop**, **;** , **else**, **end**, **then**, **do**, **]**, **,**, **)**} |
| 18.1 factor1 | {(, **[**, **epsilon**} | {**multop**, **addop**, **relop**, **;** , **else**, **end**, **then**, **do**, **]**, **,**, **)**} |
| 19. sign | {**+**, **-**} | {**id**, **num**, **(**, **not** } |