|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Prod # | Variable | First | Follows | Follows |
| 1.1 | *program* | **program** |  |  |
| 1.2.1 | *program’* | **procedure** |  |  |
| 1.2.2 | *program’* | **begin** |  |  |
| 1.2.3 | *program’* | **var** |  |  |
| 1.3.1 | *program’’* | **procedure** |  |  |
| 1.3.2 | *program’’* | **begin** |  |  |
| 2.1 | *idlst* | **id** |  |  |
| 2.2.1 | *idlst’* | **,** |  |  |
| 2.2.2 | *idlst’* | ϵ |  |  |
| 3.1 | *declarations* | **var** |  |  |
| 3.2.1 | *declarations’* | **var** |  |  |
| 3.2.2 | *declarations’* | ϵ |  |  |
| 4.1 | *type* | **integer real** |  |  |
| 4.2 | *type* | **array** |  |  |
| 5.1 | *standard\_type* | **integer** |  |  |
| 5.2 | *standard\_type* | **real** |  |  |
| 6.1 | *subdeclarations* | **procedure** |  |  |
| 6.2.1 | *subdeclarations’* | **procedure** |  |  |
| 6.2.2 | *subdeclarations’* | ϵ |  |  |
| 7.1 | *subdeclaration* | **procedure** |  |  |
| 7.2.1 | *subdeclaration’* | **procedure** |  |  |
| 7.2.2 | *subdeclaration’* | **begin** |  |  |
| 7.2.3 | *subdeclaration’* | **var** |  |  |
| 7.3.1 | *subdeclaration’’* | **procedure** |  |  |
| 7.3.2 | *subdeclaration’’* | **begin** |  |  |
| 8.1 | *subprogram\_head* | **procedure** |  |  |
| 8.2.1 | *subprogram\_head’* | **;** |  |  |
| 8.2.2 | *subprogram\_head’* | **(** |  |  |
| 9.1 | *arguments* | **(** |  |  |
| 10.1 | *parameter\_list* | **id** |  |  |
| 10.2.1 | *parameter\_list’* | **;** |  |  |
| 10.2.2 | *parameter\_list’* | ϵ |  |  |
| 11.1 | *compound\_statement* | **begin** |  |  |
| 11.2.1 | *compound\_statement’* | **id call begin while if** |  |  |
| 11.2.2 | *compound\_statement’* | **end** |  |  |
| 12.1 | *optional\_statements* | **id call begin while if** |  |  |
| 13.1 | *statement\_list* | **id call begin while if** |  |  |
| 13.2.1 | *statement\_list’* | **;** |  |  |
| 13.2.2 | *statement\_list’* | ϵ |  |  |
| 14.1 | *statement* | **id** |  |  |
| 14.2 | *statement* | **call** |  |  |
| 14.3 | *statement* | **begin** |  |  |
| 14.4 | *statement* | **while** |  |  |
| 14.5 | *statement* | **if** |  |  |
| 14.6.1 | *statement’* | **else** |  |  |
| 14.6.2 | *statement’* | ϵ |  |  |
| 15.1 | *variable* | **id** |  |  |
| 15.2.1 | *variable’* | **[** |  |  |
| 15.2.2 | *variable’* | ϵ |  |  |
| 16.1 | *procedure\_statement* | **call** |  |  |
| 16.2.1 | *procedure\_statement’* | **(** |  |  |
| 16.2.2 | *procedure\_statement’* | ϵ |  |  |
| 17.1 | *expression\_list* | **id num ( not + -** |  |  |
| 17.2.1 | *expression\_list’* | **,** |  |  |
| 17.2.2 | *expression\_list’* | ϵ |  |  |
| 18.1 | *expression* | **id num ( not + -** |  |  |
| 18.2.1 | *expression’* | **relop** |  |  |
| 18.2.2 | *expression’* | ϵ |  |  |
| 19.1 | *simple\_expression* | **id num ( not** |  |  |
| 19.2 | *simple\_expression* | **+ -** |  |  |
| 19.3.1 | *simple\_expression’* | **addop** |  |  |
| 19.3.2 | *simple\_expression’* | ϵ |  |  |
| 20.1 | *term* | **id num ( not** |  |  |
| 20.2.1 | *term’* | **mulop** |  |  |
| 20.2.2 | *term’* | ϵ |  |  |
| 21.1 | *factor* | **id** |  |  |
| 21.2 | *factor* | **num** |  |  |
| 21.3 | *factor* | **(** |  |  |
| 21.4 | *factor* | **not** |  |  |
| 21.5.1 | *factor’* | **[** |  |  |
| 21.5.2 | *factor’* | ϵ |  |  |
| 22.1 | *sign* | **+** |  |  |
| 22.2 | *sign* | **-** |  |  |