|  |  |  |
| --- | --- | --- |
|  | FIRST | FOLLOW |
| S | «non-terminal» | $ |
| DEF | «non-terminal» | N, eps, «axiom», $ |
| D\_N | «non-terminal» | «terminal», N, eps, «axiom», $ |
| N\_LST | ',', eps | ';' |
| D\_T | «terminal» | N, eps, «axiom», $ |
| T\_LST | ',', eps | ';' |
| R\_LST | N, eps | «axiom», $ |
| R | N | N, eps, «axiom», $ |
| E\_LST | '|', eps | ';' |
| E | N, T, «epsilon» | '|', eps, ';' |
| SYM\_LST | N, T, eps | '|', eps, ';' |
| SYM | N, T | N, T, eps, '|', ';' |
| AXIOM | «axiom» | $ |

S ::= DEF R\_LST AXIOM

DEF ::= D\_N D\_T

D\_N ::= "non-terminal" N N\_LST ';'

N\_LST ::= ',' N N\_LST | eps

D\_T ::= "terminal" T T\_LST ';'

T\_LST ::= ',' T T\_LST | eps

R\_LST ::= R R\_LST | eps

R ::= N "::=" E E\_LST ';'

E\_LST ::= '|' E E\_LST | eps

E ::= SYM SYM\_LST | "epsilon"

SYM\_LST ::= SYM SYM\_LST | eps

SYM ::= N | T

AXIOM ::= "axiom" N ';'

N ::= "[A-Z]+1?"

T ::= (\'[^\\s\"]\'|[a-z])

non-terminal E, E1, T, T1, F;  
terminal '+', '\*', '(', ')', n;  
E ::= T E1;  
E1 ::= '+' T E1 | epsilon;  
T ::= F T1;  
T1 ::= '\*' F T1 | epsilon;  
F ::= n | '(' E ')';  
axiom E;

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | «non-terminal» | «terminal» | «axiom» | «epsilon» | ',' | '|' | ';' | ::= | N | T | $ |
| S | DEF R\_LST AXIOM |  |  |  |  |  |  |  |  |  |  |
| DEF | D\_N D\_T |  |  |  |  |  |  |  |  |  |  |
| D\_N | "non-terminal" N N\_LST ';' |  |  |  |  |  |  |  |  |  |  |
| N\_LST |  |  |  |  | ',' N N\_LST |  | eps |  |  |  |  |
| D\_T |  | "terminal" T T\_LST ';' |  |  |  |  |  |  |  |  |  |
| T\_LST |  |  |  |  | ',' T T\_LST |  | eps |  |  |  |  |
| R\_LST |  |  | eps |  |  |  |  |  | R R\_LST |  | eps |
| R |  |  |  |  |  |  |  |  | N "::=" E E\_LST ';' |  |  |
| E\_LST |  |  |  |  |  | '|' E E\_LST | eps |  |  |  |  |
| E |  |  |  | «epsilon» |  |  |  |  | SYM SYM\_LST | SYM SYM\_LST |  |
| SYM\_LST |  |  |  |  |  | eps | eps |  | SYM SYM\_LST | SYM SYM\_LST |  |
| SYM |  |  |  |  |  |  |  |  | N | T |  |
| AXIOM |  |  | "axiom" N ';' |  |  |  |  |  |  |  |  |