Grammaire

```
    PROGRAM ::= program ID ; BLOCK .

    BLOCK ::= CONSTS VARS INSTS

• CONSTS ::= const ID = NUM ; { ID = NUM ; } | ε

    VARS ::= var ID { , ID } ; | ε

INSTS ::= begin INST { ; INST } end

    INST ::= AFFEC | SI | TANTQUE | ECRIRE | LIRE | FUNC CALL |

   FOR STMT | REPEAT STMT | ε
AFFEC ::= ID := EXPR
SI ::= if COND then INST [ else INST ]

    TANTQUE ::= while COND do INST

ECRIRE ::= write ( EXPR { , EXPR } )
LIRE ::= read ( ID { , ID } )

    COND ::= EXPR RELOP EXPR

RELOP ::= = | <> | < | > | <= | >=
EXPR ::= TERM { ADDOP TERM }
ADDOP ::= + | -
TERM ::= FACT { MULOP FACT }
MULOP ::= * | /
• FACT ::= ID | NUM | ( EXPR )

    CASE STMT ::= case EXPR of CASE BRANCHES [ else INST ] end ;

CASE BRANCHES ::= CASE BRANCH { ; CASE BRANCH }

    CASE BRANCH ::= NUM : INST

    FUNC DECL ::= function ID ( PARAMS ) : TYPE ; FUNC BODY

    FUNC BODY ::= begin INSTS end

PARAMS ::= PARAM { ; PARAM }

    PARAM ::= ID { , ID } : TYPE

• TYPE ::= Integer | Real

    FUNC CALL ::= ID (ARG LIST)

ARG LIST ::= EXPR { , EXPR }

    PROC DECL ::= procedure ID ( PARAMS ) ; PROC_BODY

    PROC_BODY ::= begin INSTS end

FOR STMT ::= for ID := EXPR TO EXPR DO INST

    TO ::= to | downto

    REPEAT STMT ::= repeat INSTS until COND

    REAL ::= INTEGER FRACTION

    INTEGER ::= [ + | - ] DIGIT { DIGIT }

FRACTION ::= . DIGIT { DIGIT }
```

DIGIT ::= 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9
ID -> LETTER { LETTER | DIGIT | "_" }

• LETTER -> "a" | "b" | ... | "z" | "A" | "B" | ... | "Z"