

# Grammaire

- PROGRAM ::= program ID ; BLOCK .
- BLOCK ::= CONSTS VARS INSTS
- CONSTS ::= const ID = NUM ; { ID = NUM ; } |  $\epsilon$
- VARS ::= var ID { , ID } ; |  $\epsilon$
- INSTS ::= begin INST { ; INST } end
- INST ::= AFFEC | SI | TANTQUE | ECRIRE | LIRE | FUNC\_CALL | FOR\_STMT | REPEAT\_STMT |  $\epsilon$
- 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 | Boolean | Char
- 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