<program> 🡪 <implementations>

<implementations> 🡪 implementations <function>

<function> 🡪 function <function name> return type <type> is <variables> <begin> endfun <function name>

<function name> 🡪 main | <id>

<variables> 🡪 variables <variable dec>

<variable dec> 🡪 define <id> of type <type> <variable dec> | define <id> of type <type>

<id> 🡪 <letter><id> | <letter><id\_digit> | <letter>

<id\_digit> 🡪 <digit><id> | <digit><id\_digit> | <digit>

<letter> 🡪 a | b | c | d | e | f | g | h | I | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z

<digit> 🡪 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0

<type> 🡪 integer | double

<begin> 🡪 begin <statement> exit

<statement> 🡪 <display><statement> | <assignment><statement> | <display> | <assignment>

<display> 🡪 display <string> | display <field>

<string> 🡪 “<char><string> |<char>”

<field> 🡪 <id>

<char> 🡪 A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |Q | R | S | T | U | V | W | X | Y | Z | a | b | c | d | e | f | g | h | I | j | k | l | m | n | o | p | q | r | s | t | u | v | w | x | y | z | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 | “ | ” | , | + | - | \* | \ | / | < | > | . | ! | # | ? | ) | ( | % | ; | : | { | } | [ | ]

<assignment> 🡪 set <id> = <integer>

| set <id> = <double>

| set <id> = <expr>

<integer> 🡪 <digit><integer> | <digit>

<double> 🡪 <double>.<double> | <digit><double> | <digit>

<expr> 🡪 <expr> + <term> | <expr> - <term>

| <term>

<term> 🡪 <term> \* <factor> | <term> / <factor>

<factor> 🡪 <id> | <integer> | <double>