Instituto Tecnológico y de Estudios Superiores de Monterrey

Campus Monterrey

Tecnológico de Monterrey

Desarrollo de aplicaciones avanzadas de ciencias computacionales (Gpo 503)

BabyDuck - entrega #0

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Expresiones regulares	
Token	**Expresión regular**
PROGRAM	program
VAR	var
VOID	void
MAIN	main
END	end
IF	if
ELSE	else
WHILE	while
DO	do
PRINT	print
ID	[a-zA-Z_][a-zA-Z0-9_]*
CTE_FLOAT	[0-9]+\.[0-9]+
CTE_INT	[0-9]+
CTE_STRING	"([-~]|\\["\\ntbr])*"
NEQ	!=
GT	>
LT	<
PLUS	+
MINUS	-
TIMES	*
DIV	/

Expresiones regulares	
ASSIGN	=
SEMI	;
COLON	:
COMA	,
LPAREN	(
RPAREN	)
LBRACE	{
RBRACE	}
COMMENT	//[^\n]*

Listar todos los Tokens que serán reconocidos por el lenguaje

Palabras reservadas

- PROGRAM
- VAR
- VOID
- MAIN
- END
- IF
- ELSE
- WHILE
- DO
- PRINT
- ID

Identificador

- ID

Constantes

- CTE_INT
- CTE_FLOAT
- CTE_STRING

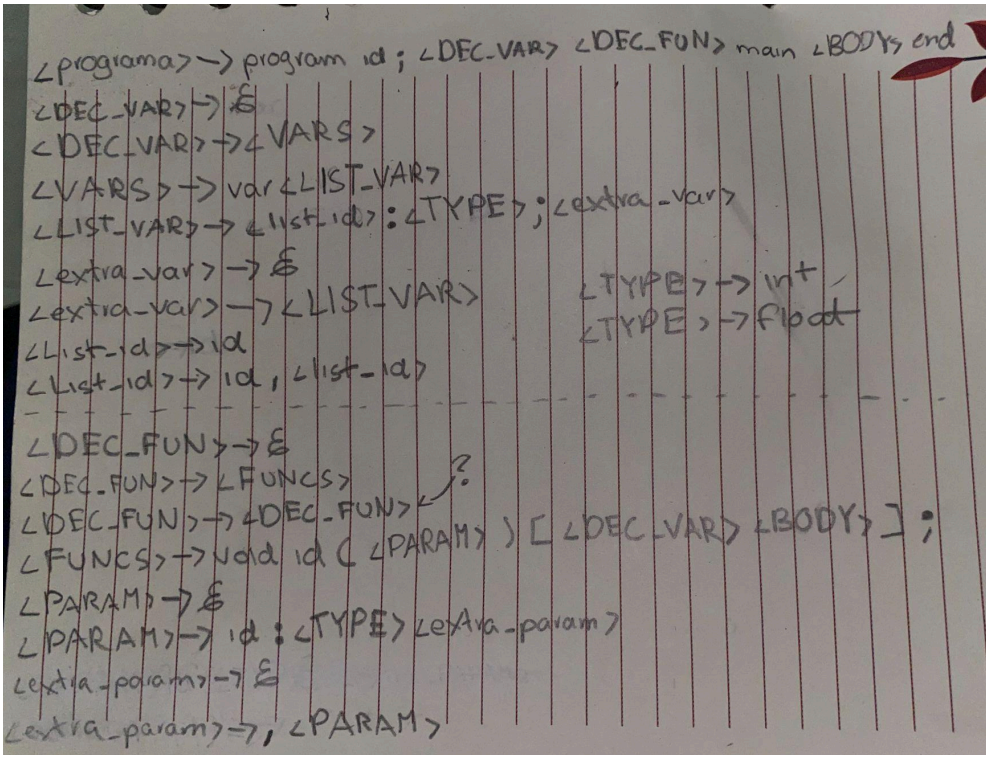
Operadores

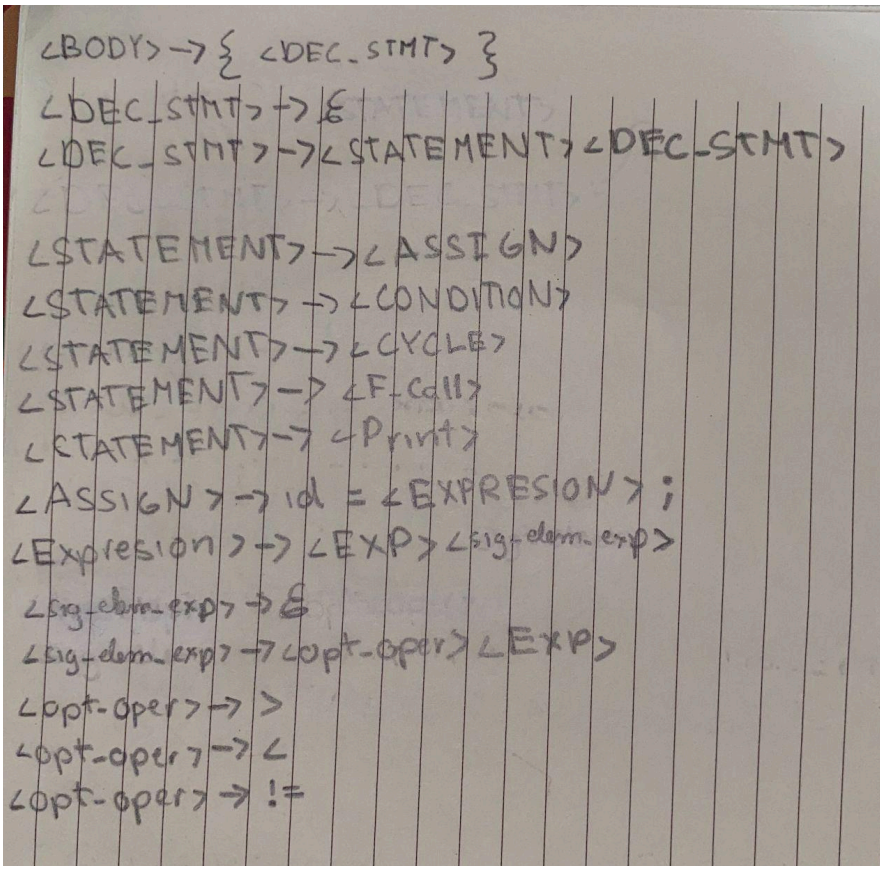
- NEQ
- GT
- LT
- PLUS
- MINUS
- TIMES
- DIV
- ASSIGN

Símbolos

- **SEMI**
- **COLON**
- **COMA**
- **LPAREN**
- **RPAREN**
- **LBRACE**
- **COMMENT**

Context Free Grammar (hechas a mano al menos para esta primera entrega)





<EXP> → <LIST_EXP>

<LIST_EXP> → <TERMINO>

<LIST_EXP> → <TERMINO> <opt_sumres> <LIST_EXP>

<opt_sumres> → +

<opt_sumres> → -

<TERMINO> → <LIST_TERM>

<LIST_TERM> → <FACTOR>

<LIST_TERM> → <FACTOR> <opt_divmul> <LIST_TERM>

<opt_divmul> → *

<opt_divmul> → /

<FACTOR> → (<EXPRESION>)

<FACTOR> → <fct_prim> <fct_seg>

<fct_prim> → ε

<fct_prim> → <opt_sumres>

<fct_seg> → id

<fct_seg> → <CTE>

<CTE> → cte_int

<CTE> → cte_float

<CONDITION> → if (<EXPRESION>) <BODY> <else_stmt> ;

<else_stmt> → ε

<else_stmt> → else <BODY>

<CYCLE> → while (<EXPRESION>) do <BODY> ;

<F_call> → id (<f_call_exp>) ;

<f_call_exp> → ε

<f_call_exp> → <EXPRESION>

<f_call_exp> → <EXPRESION> , <f_call_exp>

<Print> → print (<print_param>) ;

<print_param> → <EXPRESION> <extra_print_param>

<print_param> → cte.string <extra_print_param>

<extra_print_param> → ε

<extra_print_param> → , <print_param> <extra_print_param>

estará de mas?