# Gramática proyecto 1 OLC

# Tokens y expresiones regulares

## <u>Generales</u>

```
MULTILINE_COMMENT := <! U* !>
SET_DECLARATION := CONJ

ID := [Identificador]
ONELINE_COMMENT := // U* \n
LBRACE := {
RBRACE := }
COLON := :
ARROW := ->
SEMICOLON := ;
SCOPE_BREAK := %%
WHITESPACE := \t | \n | ' '
```

#### Símbolos de la notación de conjuntos

```
TILDE := ~

COMMA := ,

DIGIT := [0-9]

LOWERCASE := [a-z]

UPPERCASE := [A-Z]

ASCII := [Caracteres ASCII del 32 al 125 omitiendo Letras y dígitos]
```

### Símbolos de la notación de ER's

```
AND := .

OR := |

KLEENE := *

PLUS := +

QUESTION := ?

LETTER := [a-zA-Z]

DIGIT := [0-9]

ESCAPED_LINEBREAK := " \n "

ESCAPED_SINGLE_QUOTE := " \' "

ESCAPED_DOUBLE_QUOTE := " \' "
```

#### Gramática

```
PROGRAM ::= <LBRACE> SCOPES <RBRACE>
SCOPES ::= DECL_SCOPE <SCOPE_BREAK> <SCOPE_BREAK> STMT SCOPE
DECL_SCOPE ::= DECL DECLS
DECL ::= SET DECL | REGEX DECL
DECLS ::= DECL DECLS | \varepsilon
SET DECL ::= <SET DECLARATION> <COLON> <ID> <ARROW> SET <SEMICOLON>
SET ::= COMPR SET | SET ELEMENTS
COMPR SET ::= SET ELEMENT <TILDE> SET ELEMENT
SET ELEMENT ::= <ASCII> | <UPPERCASE> | <LOWERCASE> | <DIGIT>
EXTEND SET ::= SET ELEMENT SET ELEMENTS
SET ELEMENTS ::= \langle COMMA \rangle SET ELEMENT | \varepsilon
REGEX DECL ::= <ID> <ARROW> REGEX EXPR
REGEX EXPR ::= REGEX TERM REGEX EXPRS <SEMICOLON>
REGEX EXPRS ::= REGEX TERM REGEX EXPRS \mid \varepsilon \mid // <- !!!
REGEX TERM ::= <AND> REGEX TERM REGEX TERM
               <OR> REGEX TERM REGEX TERM
               <KLEENE> REGEX TERM
               REGEX TERMINAL
REGEX_TERMINAL ::= <LETTER>
```

```
| <ESCAPED>
| <STRING >
| SET_REFERENCE

SET_REFERENCE ::= <LBRACE> <ID> <RBRACE>

STMT_SCOPE ::= EVAL_STMT EVAL_STMTS

EVAL_STMT ::= <ID> <COLON> <STRING> <SEMICOLON>

EVAL_STMTS ::= EVAL_STMT | ε
```