

Grammar

Definition

These lines contain the grammar matching with the Lutin language, that is used in the project.

- 1) $P \rightarrow BD\ BI$
- 2) $BD \rightarrow BD\ D\ pv$
- 3) $BI \rightarrow BI\ I\ pv$
- 4) $D \rightarrow var\ id\ IDL$
- 5) $IDL \rightarrow IDL\ vir\ id$
- 6) $D \rightarrow const\ INI\ INIL$
- 7) $INIL \rightarrow INIL\ vir\ INI$
- 8) $INI \rightarrow id\ eg\ num$
- 9) $I \rightarrow ecrire\ E'$
- 10) $I \rightarrow id\ aff\ E'$
- 11) $I \rightarrow lire\ id$
- 12) $E' \rightarrow E$
- 13) $E \rightarrow E + T$
- 14) $E \rightarrow E - T$
- 15) $E \rightarrow T$
- 16) $T \rightarrow T * F$
- 17) $T \rightarrow T / F$
- 18) $T \rightarrow F$
- 19) $F \rightarrow (E)$
- 20) $F \rightarrow id$
- 21) $F \rightarrow num$
- 22) $BD \rightarrow \varepsilon$
- 23) $BI \rightarrow \varepsilon$
- 24) $IDL \rightarrow \varepsilon$
- 25) $INIL \rightarrow \varepsilon$

Indications

Nonterminal symbols

Symbol Meaning

P	Program
BD	Declaration Block
BI	Instruction Block
D	Declaration
I	Instruction

IDL	IDentifiers List
INI	INItializer
INIL	INItialisers List
E/E'	Expression ('+' / '-' term)
T	Term ('/' / '*' term)
F	Final

Terminal symbols

Symbol	Meaning	Regular Expression
+	'+' character	+
-	'-' character	-
*	'*' character	*
/	'/' character	/
('(' character	(
)	')' character)
pv	semicolon	;
id	identifier (variable name)	[a-zA-Z_] [a-zA-Z0-9_]*
var	'var' keyword	var
vir	comma	,
const	'const' keyword	const
eg	'=' character	=
aff	':=' characters	:=
num	number	[0-9]+(,[0-9]+)?
ecrire	'ecrire' keyword	ecrire
lire	'lire' keyword	lire