Language L:

Arithmetic expressions with:

"integers" , "+" , "-" , "x" , "/" , "(" , ")"

$X = \{0-9, x, -, +, /, (,)\}$

our tokens are regular so we use finite automate (DFA)

Tokens:

INT,	PLUS,	MUL,	LPAREN,	RPAKEN
0-9	+	x	(	)

language Grammar:

$S \to S + T \mid T$

$T \to T \times F \mid F$

$F \to (E) \mid INT.$

Grammar Pour apliquer FNG

removing left recursion:

$S \to T S'$

$S' \to + T S' \mid$

$T \to F T'$

$T' \to \times F T'$

$F \to (E) \mid INT.$

← FN
our autanaute in FNG
F.

AbsTract Syntax Tree.

2 types of Nodes :- binary Expression (+, ×)

- ~~Nub~~ Number

exemple

3 + 4 × 2 →