1   Regular Grammar for CUTE Lang

This chapter explains what regular grammar is used in CUTE Lang.

1.1   EBNF

To explain without any complexity, grammar is explained by EBNF (Extended BNF).

EBNF for Regular Grammar

```
program             = { whites | lexeme } .

whites              = white .
white               = whitechar | comment .

whitechar           = newline | vtab | tab | space .
newline             = cr lf | cr | lf | ff .
cr                  = "\r" .
lf                  = "\n" .
ff                  = "\f" .
vtab                = "\v" .
tab                 = "\t" .
space               = " " .

comment             = sl com | ml com .
sl com              = sl beg, { sl any }, [ newline ] .
sl beg              = "//" .
sl any              = visible | space | tab .
ml com              = ml beg, ml anys, { ml com, ml anys }, ml end .
ml beg              = "/*" .
ml end              = "*/" .
ml anys             = { ml any }
                      - ( { ml any }, ( ml beg | ml end ), { ml any } ) .
ml any              = visible | whitechar .

lexeme              = bi sym | un sym | special | res sym | res id
                    | literal | id .
literal             = byte | integer | float
                    | char | string .
special             = "{" | "}" | "," | ";" | "[" | "]" | "(" | ")" .
```