LISP (LIST Processing — 1950's)

eg: (+ 1 2) (+ 1 2 3 4)

function, arguments

(* 2 (+ 3 4))

Formal definition of Syntax of LISP

"grammar" — defines structure of a language.

"or", "nonterminal"

expr : num | list

list : '(' expr* ')'

* = zero or more

literal token, "terminal"

num = a positive integer token.

Grammars are recursive

Therefore, so are programs to process grammars.

One function per rule.