A = L + C

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Overview

- Algorithm can be and should be broken into 2 parts: **Logic** and **Control**

- A = L + C1 = L + C2
- A = L1 + C1 = L2 + C2

Logic

- Horn Clauses
  - Assertions
  - Procedure Definitions
  - Denials
  - Contradiction
- Two possible traversals
  - Top-down
  - Bottom-up
  - Bi-directional

Data Structure

- Can be either part of the logic or control
- Expressed with terms vs. with relations

Example: cons (on the board)

Control

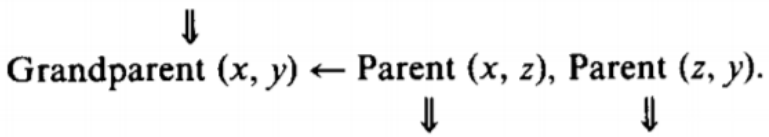
- Order of Executing Logic
- Way of Executing Procedures (sequential/parallel)
- Data Structures
- Investigation of Alternative Procedures

x and y have the same leaves ← the leaves of x are z,
the leaves of y are z',
z and z' are the same

x and x are the same ←

Why should we do this

- Separation of concerns: Easy to improve control while keeping the same logic
- Efficiency:



Other example: database queries