Prop: Res $\rightarrow$ CDCL $\rightarrow$ Superposition

Fol 1: without Equality

Res $\rightarrow$ Orderings $\rightarrow$ Superposition

Unification

Defined on terms under substitutions

clauses
\[ f(g(x), a) \]

2.1 \[ f(g(b), c) \geq g(a) \quad b > a \]

\[ f(g(b), c) > g(a) \]

2.2 \[ f > g \]

\[ f(a, a) \geq f(a, a) \]

\[ f(a, a) \neq f(a, a) \]
Implement LPO

1. 2. 3.

- Compute all subsets (say to a day)

  \[ f(g(c)_k), g(c) \]

- a, b, c, g(a), g(c), f(g(c)_k)

- Process bottom-up store results (dynamic programming)

90's research paper: how to implement LPO