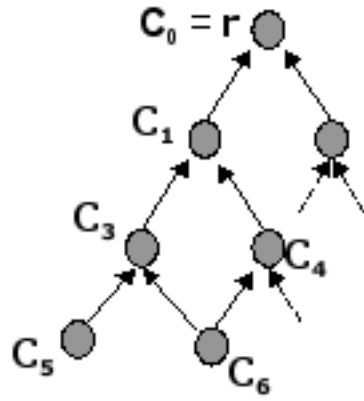
Formal Framework

- $C = \{ c_i \mid 0 \leq i < N \}$ is a finite partially ordered set of concepts (Ontology).
- Concepts are related by binary relationship, denoted by $\preceq$

  eg: $c_3 \preceq c_1$, $c_6 \preceq c_3$, $c_5 \preceq r$



- Set of Ancestors $A_i = \{ c_k \mid c_i \preceq c_k \}$
- Two concepts (c_i, c_j) are comparable (~) if either $c_i \preceq c_j$ or $c_j \preceq c_i$
- All concepts in A_i may not be comparable as the ontology is a DAG (as opposed to a tree)