

COMPSCI Assignment 1

1. Propositional Logic problem

Many-half-sister-of-Ann \leftarrow Sue-Mother-of-Mary \wedge
Sue-Mother-of-Ann \wedge Mary-is-female \wedge Ed-Father-of-Mary
 \wedge Sam-father-of-Ann
continues

2. Predicate Logic Problem

\forall Parent \forall Person \forall Halfsister

female(Halfsister) \wedge parentOf(Parent1, person) \wedge parentOf(Parent1, Halfsister)
 \wedge not(= (Person, Halfsister)) \wedge parentOf(Parent2, Person)
 \wedge parentOf(Parent3, Halfsister) \wedge not(= (Parent2, Parent3))
 \Rightarrow halfsisterOf(Halfsister, Person)

Ann-half-sister-of-Mary \leftarrow Sue-Mother-of-Mary \wedge Sue-Mother-of-Ann
 \wedge Ann-is-female \wedge Ed-father-of-Mary \wedge Sam-father-of-Ann