CS2104 Programming Language Concepts

Tutorial 10 : Logic Programming

(week of 2nd November 2015)

Please may work from loris-88. Copy files from ~chinwn/prolog

Q1   Invoke prolog. Then consult(tut9). Test the following:
  a. grantparent(G,mary).
  b. ancestor(A,mary)
  c. sibling(S,mary)
Count the number of solutions for each query, and explain the redundancies, if any.

Q2. Write predicate definitions for the following relationship:
  a. aunt
  b. cousin
  c. nephew

Q3. Implement the following list function:
  a. last – to retrieve last element of list
  b. len – to compute the length of a list
  c. nth – to return the n-th element of a list
  d. occurs – to count the occurrences of a given element

Q4. Draw resolution trees to illustrate the execution of the following queries:

  :- last([1,2,3],X)

  :- occurs([2,3,3],3,N)