

CA208 Logic

Lab 3

Working with lists and recursion

Aim

The aims of this practical is:

- to become familiar with manipulating lists in Prolog, and
- to become familiar with recursion.

1. Develop your own list functions.

Prolog comes with a set of useful list functions. The goal of this exercise is to write your own version of standard list functions.

myElem(X,A)

This relation is true if X is an element of list A.

myHead(X,A)

This relation is true if X is the first element of list A.

myLast(X,A)

This relation is true if X is the last element of list A.

myTail(A,B)

This relation is true if list A is the tail of list B.

myAppend(A,B,C)

This relation is true if list C is list B appended to the end of list A.

myReverse(A,B)

This relation is true if list A is the reverse of list B.

myDelete(X,A,B)

This relation is true if list B is list A with the first occurrence of X removed.