CA208 Logic
Lab 4

Arithmetic and Operators

Aim

The aims of this practical is:

- to become familiar with arithmetic in Prolog, and
- to become familiar with operators.

1. Fibonacci Numbers

Write a Prolog relation fib(X,Y) that is true if Y is the Fibonacci Number of X. The Fibonacci Number of X is the sum of the Fibonacci Numbers of (X-1) and (X-2), for X > 1. The Fibonacci Number of 1 is 1 and the Fibonacci Number of 0 is 1.

2. Area of a triangle

Define an infix binary operator, tA, that is true if the right operand is the area of a triangle defined by the left operand. A triangle A/B has a base of A and a perpendicular height of B. For example, the clause

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6/4 tA X
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is true if the value X is 12.