



Prolog cheat sheet

Facts

Socrate is human.

human(socrate).

Rules

All men(humans) are mortal.

X (somebody) is mortal if X (that
somebody) is human.

mortal(X) :- human(X).

Queries

Is Socrate mortal?

?- mortal(socrate).

Choice

fun(X) :- /* something is fun if */

pc(X), /* it is a pc and */

unix(X). /* it is running unix */

fun(X) :- /* or it is fun if */

old(X), /* it is old and */

amiga(X). /* it is an amiga */

fun(ice_cream). /* the ice_cream is also fun */

Instructions

assert(c). Add the rule c to the
database

retract(c). Remove the c from the
database

asserta(c). Add c at the beginning of
the database

assertz(c). Add c at the end of the
database

/* Example */

?- sunny.

no.

?- assert(sunny).

yes.

?- sunny.

yes

?- retract(sunny).

yes.

?- sunny.

no.

Data Types

Lists

Sample List:

[Tequila,Whisky,Vodka,Martini,Muscat,Malibu,Soho,Epita]



Empty List: []

List Functions

Append: `append([a,b,c],[d,e,f],X)`

Head/Tail: `[X|Y]`

Membership check: `member(X, Y)`

Operators

Logical Operators

Operator Description

; Logical OR

, Logical AND

Relational Operators

Operator Description

< Less Than

<= Less Than or Equal To

> Greater Than

>= Greater Than or Equal To

:= Equal To

/= Not Equal To