

Annotated Prolog Demo

Welcome to SWI-Prolog (Multi-threaded, 64 bits, Version 7.2.3)

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Please visit <http://www.swi-prolog.org> for details.

For help, use `?- help(Topic).` or `?- apropos(Word).`

List all of the sports.

1 `?- sport(S),write(S),nl,fail.`

football

baseball

basketball

false.

How many players are required for a football team?

2 `?- rule(football,players(P),_).`

P = 11.

What type of surface is basketball played on?

3 `?- rule(basketball,_,C).`

C = court.

List the complete history of every sport.

4 `?- history(Sport,inventor(Inventor),City,Year).`

Sport = football,

Inventor = 'Walter Camp',

City = 'New Haven, CT',

Year = date(1869)

Sport = baseball,

Inventor = 'Alexander Joy Cartwright',

City = 'New York City, NY',

Year = date(1845)

Sport = basketball,

Inventor = 'James Naismith',

City = 'Springfield, MA',

Year = date(1891).

What sports are played on a field?

5 ?- rule(S,_,field),write(S),nl,fail.

football

baseball

false.

Were any sports created in New York City, NY in the year 1845?

6 ?- history(_,_, 'New York City, NY', date(1845)).

true.

What sport invented by Alexander Joy Cartwright that requires 9 players for a team?

7 ?- history(S,inventor('Alexander Joy Cartwright'),_,_);rule(S,players(9),_).

S = baseball

S = baseball

false.

Is football a sport?

8 ?- sport(football).

true.

List all of the inventors of sports.

9 ?- history(_,inventor(I),_,_),write(I),nl,fail.

Walter Camp

Alexander Joy Cartwright

James Naismith

false.

What are the rules of baseball?

10 ?- rule(baseball,Players,Surface).

Players = players(9),

Surface = field.

Stop Program.

11 ?- halt.