

1. Write a Prolog program for forward Chaining As per the law, it is a crime for an American to sell weapons to hostile nations. Country A, an enemy of America, has some missiles, and all the missiles were sold to it by Robert, who is an American citizen. Prove that "Robert is criminal."

Program :

% Facts

american(robert).

hostile_nation(country_a).

missiles(country_a).

sold_to(robert, country_a).

% Rules for forward chaining

criminal(X) :- american(X), sells_weapons(X, Y), hostile_nation(Y).

sells_weapons(X, Y) :- american(X), missiles(Y), sold_to(X, Y).

% Query to check if Robert is a criminal

?- criminal(robert).

Output :

?- criminal(robert).

% Output: true.