% Define facts about car options and their attributes.

car\_option(sedan, compact, gasoline, comfortable, family\_car, yes, no, 8, 78000, audiR8).

car\_option(suv, midsize, gasoline, sporty, family\_car, no, yes, 20, 91000, audiA6).

car\_option(convertible, compact, gasoline, sporty, sports\_car, yes, yes, 15, 45666, mercediesCLA200).

car\_option(suv, full\_size, hybrid, luxurious, travel, yes, yes, 10, 120000, mercidiesGLE).

car\_option(sedan, midsize, electric, comfortable, commuting, no, yes, 25, 76000, mercediesX4).

car\_option(suv, full\_size, gasoline, rugged, travel, yes, yes, 13, 81000, bmwX4).

car\_option(sedan, compact, hybrid, economical, commuting, yes, no, 11, 69000, bmwX7).

car\_option(sports\_car, sports, gasoline, sporty, sports\_car, no, no, 18, 74000, volksvagonTygun).

car\_option(suv, midsize, hybrid, luxurious, family\_car, no, yes, 19, 96000, scodaRapid).

car\_option(hatchback, small, electric, eco-friendly, commuting, yes, no, 23, 73000, hyundaiCreta).

car\_option(sedan, midsize, gasoline, comfortable, family\_car, sunroof, yes, 17, 45000, hyundaiI20).

car\_option(suv, full\_size, hybrid, luxurious, travel, yes, no, 14, 69000, hyundaiX61).

car\_option(hatchback, compact, electric, eco-friendly, commuting, no, yes, 15, 95000, porche911).

car\_option(sports\_car, sports, gasoline, sporty, sports\_car, no, no, 22, 56000, marutiDezire).

car\_option(suv, midsize, gasoline, rugged, travel, yes, no, 16, 84000, kiaCeltus).

% Define rules to recommend car options based on user preferences.

recommend\_car(User, CarOption) :-

ask\_car\_preferences(User, Size, FuelType, Style, Purpose, HasSunroof, HasRearCamera, MilageExpectation, PricePoint),

(car\_option(CarOption, Size, FuelType, Style, Purpose, HasSunroof, HasRearCamera, MilageExpectation, PricePoint, \_) ->

display\_car\_attributes(CarOption, Size, FuelType, Style, Purpose, HasSunroof, HasRearCamera, MilageExpectation, PricePoint, \_) ;

write('Sorry, no suitable car option available based on your preferences.'), nl).

% Display the ignored car attributes when a match is found.

display\_car\_attributes(CarOption, Size, FuelType, Style, Purpose, HasSunroof, HasRearCamera, MilageExpectation, PricePoint, CarName) :-

car\_option(CarOption, Size, FuelType, Style, Purpose, HasSunroof, HasRearCamera, MilageExpectation, PricePoint, CarName),

write('Congratulations, We have the exact car matching your preferences :/ '),

write('Car Name: '), write(CarName), nl.

% Ask the user about their car preferences.

ask\_car\_preferences(User, Size, FuelType, Style, Purpose, HasSunroof, HasRearCamera, MilageExpectation, PricePoint) :-

write('Hello, '), write(User), write('!'), nl,

write('What size of car do you prefer? (compact/spacious/rugged)'),

read(Size),

write('What type of fuel do you prefer? (gasoline/diesel/electric/hybrid)'),

read(FuelType),

write('What car style do you like? (sporty/luxury/practical)'),

read(Style),

write('What is the primary purpose of the car? (family\_car/performance\_car/utility\_vehicle/eco\_car)'),

read(Purpose),

write('Do you want a sunroof for your car? (yes/no)'),

read(HasSunroof),

write('Do you need a rear view Camera? (yes/no)') ,

read(HasRearCamera),

write('Milage Expectations (in Km/hr)'),

read(MilageExpectation),

write('Price? (in Rupees'),

read(PricePoint).

% Example usage:

% To recommend a car option for 'User':

% recommend\_car(user, CarOption).