

Jess Lab Test – used and new cars

Write two Jess templates, one for used or second-hand cars, the other for new cars. Used car records should have slots for mileage and year of sale while new cars have a slot for warranty period. In addition there should be slots for cost, colour (with default black) and make (manufacturer such as Ford). Use deffacts to create a sample database of car.

(15 marks)

For each of the following write a single rule, except possibly the last and rule 3 which might need two rules, that uses **pattern matching** so that the rule:

1. matches and then displays the make, colour and warranty period of all new cars but whose make is not Volkswagen and which are coloured red or black.
2. will display the make, colour and cost of all new cars whose cost is less than €30,000 and of all used cars with a mileage less than 50,000.
3. will display all used cars for a given year, which is to be inputted by the user, and which will only display these if there are no used Volkswagens for sale.
4. will display all used cars:
 - which are not Volkswagen and whose mileage is between 20,000 and 50,000
 - and all Volkswagens sold after 2012 whose price is < 10,000.
5. will find the make, cost and mileage of the cheapest used car with less than 50,000 mileage and whose colour cannot be red or black. Do not use global variables.

(all rules worth 15 marks each, except rules 3 & 5 which are worth 20 marks each)

Submission to Webcourses

Save code in a file named **used-new-cars.clp** and submit to Webcourses by the end of the lab session at the latest.