## Car Manufacturing Database

Consider the following relations for the Car Manufacturing database:

**CONTINENTS (*Contid*, continent)**

**COUNTRIES (*Countryid*, countryname, continent)**

**CAR_MAKERS (*Id*, maker, fullname, country)**

**MODEL_DETAILS (*Modelid*, maker, model)**

**CAR_NAMES (*Id*, model, descr)**

**CAR_DETAILS (*Id*, mpg, cylinders, edispl, horsepower, weight, accel, year)**

a) Understand the database semantics through README_CAR.txt file.

b) Draw schema diagram for Car Manufacturing database.

*c)* Create relations with appropriate data types and integrity constraints in order to populate values from the *Car.sql* file*.*

Write the following using JOIN / Sub-query:
(Write two equivalent SQL statements for at least any one of following query)

1. Display the models that was not manufactured by any of the car makers.

2. For all the continents list the number of car makers if there were a car manufacturing company.

3. Display the pair of cars (ID) that has same mileage, horsepower and acceleration. The pairs should not be repeated in the result.

4. Display the number of cars produced by each car manufacturing company with in each model. Sort the result by the company name.

5. Display the model, name of car, mpg and weight of car(s) with maximum mileage among the heavy weight (bulky) cars. The car with weight more than the average weight of all cars are known as heavy weight (bulky) cars.

6.  Display the details (model,car_name,mileage,horsepower,acceleration,weight) of car(s) having mileage, horsepower, acceleration more than the average of mpg, horsepower, accel of all cars and its weight should be lesser than the average weight of all cars.
7.  List the year, car maker that manufactured maximum number of cars.
8.  Display the maker name, model name, car name, mileage and year of the car with the maximum mileage for each model having more than one car. Sort the result by the car maker.

    Write the following using Set Operations:
9.  Rewrite the query 1.
10. List the car names (description) and its details that was manufactured on 1976 and 1982.

What you have to submit:

1.  Schema Diagram with constraints
2.  Demo script file