1. Design an ER diagram for an application that models a car-insurance company whose customers own one or more cars each. Analyze the requirements by identifying the entities, attributes, relationships, keys, constraints etc. Apply extended entity-relationship features to the design. Defend your design with proper assumptions and justifications. Map the ER model into a relational model.

2. Create tables, populate with data and construct [queries](http://etcm.ticollege.org/cms/mod/assign/view.php?id=2027) (advanced) in SQL to extract information from the car insurance company’s database. Consider a car-insurance company whose customers own one or more cars each. Each car has associated with it zero to any number of recorded accidents.

3. Enter at least 5 sets of records in each table form created in part (ii).

4. Write and run the following SQL [queries](http://etcm.ticollege.org/cms/mod/assign/view.php?id=2027) for your database:

1. Find the total number of people who owned cars that were involved in accidents in 2010.
2. Find the number of accidents in which the cars belonging to “XYZ” were involved.
3. Add a new accident to the database; assume any values for required attributes.
4. Delete the model ‘Scorpio belonging to “ABC”.
5. Update the damage amount for the car with license number “AIBPC2010” in the accident with report number “FIR271” to Rs. 5000.