Abstract
Now it is the time we map our design in the E-R diagram to relational schema, and executable SQL DDL statements. This tutorial contains 2 questions for you to get familiar with this process and a first glance to SQL.

Question 1
Following from Tutorial 1, Question 1. We have the E-R diagram as shown in figure 1. Now your task is to 1) generate from the E-R diagram the corresponding relational schema. 2) Write the corresponding CreateTable statements in SQL.

Comments:
1. first write schema using underline for keys.
2. Create SQL statement for all the attributes.
3. Add in constraints (Key, not_null, foreign key etc.)
Figure 1: Motor-branch E-R diagram

Question 2

Suppose you execute the following SQL statements in sequence. What is the result at the end of each statement?

1) CREATE TABLE r1 ( 
    a1 INTEGER,
    a2 CHAR(20),
    PRIMARY KEY (a1) )

2) CREATE TABLE r2( 
    a3 INTEGER,
    a4 DATE,
    a5 INTEGER,
3) INSERT INTO r1 VALUES (111, '111')
4) INSERT INTO r1 VALUES (222, '222')
5) INSERT INTO r2 VALUES (1, '08-JUN-2003', 111)
6) INSERT INTO r2 VALUES (2, '08-JUN-2003', 333)
7) ALTER TABLE r2 ADD a6 CHAR(10)
8) INSERT INTO r2 VALUES (3, '08-JUN-2003', 111, 'a')
9) DELETE FROM r1 WHERE r1.a2 = '111'
10) DROP TABLE r2
Question 3

Consider the following ER diagram. Write an SQL specification with primary and foreign key constraints to create tables for relations: Student, Course, and Enrolled.

Figure 2: student-enrolment ER-diagram