Database Management with SQL using MySQL Server

ELEC Agency sales **elec**tric and **elec**tronic products with the branches located in various districts. They maintain 4 separate data sheets to keep their company details as follows.

Item datasheet - Details of electric and electronic products
Store datasheet - Details of stored quantities in their branches
Location datasheet - Details of the branches

Based on this case, develop the **ELEC** database in **MySQL** and practice the questions in your assignment.

1. Log on to the MySQL server using given user name and password.
   mysql –u root -p

2. Create a blank database as "sxxxx**elec**". (*Start your database name with "**s**" followed by four digits of your registration number. Eg: s3400elec*)
   create database sxxxxelec;

3. Active your database as the current working database.
   use sxxxxelec

4. Create table called "**item**" using the following structure. **(item_code** should be the primary key**)**

Description of the Table structure

Field Name	Data Type	Length	Properties
item_code	Char	4	Primary Key
It_description	Varchar	25	
It_unit_price	Double	(9,2)	
It_imported	int		
It_supplier	Text	20	

```
create table item
        (item_code      char(4)  primary key,
        it_description  varchar(25),
        it_unit_price   double(9,2),
        it_imported     int,
        it_supplier      text(20)          );
```

5. Add following records to above table.
   insert into item values('IT10','Television',2400.00,1,'Sony');

item_code	It_description	It_unit_price	It_imported	It_supplier
IT10	Television	24000.00	1	Sony
IT11	Computer	60000.00	1	Dell
IT11	Laser Printer	19000.00	1	HP
IT13	VCD Player	7599.00	1	
IT16	Scanner	16000.00		HP
IT17	Refrigerator	65000.00	1	LG
IT18	Table Lamp	2999.90	0	Abans
IT19	Wall Clock	1200.00	1	
IT20	Blender	4800.00	1	National
IT14	Oven	7300.00	0	Abans

6. Create the following table structure called **location. (lo_code** should be the primary key**)**

Field Name	Data Type	Length	Properties
lo_code	char	4	Primary Key
lo_name	varchar	25	
Lo_address	Text	50	

7. Enter following data into **location** table.

lo_code	lo_name	lo_address
L01	Colombo	Colombo 04
L02	Kalutara	Main Street
L03	Matara	Dharmapala Mawatha

8. Observe the following data set and create a suitable table structure called **store** to add following record to the same table.

st_item_code	st_location_code	st_qty	st_date
IT10	L01	30	2015-04-08
IT10	L03	10	2015-04-25
IT11	L01	25	
IT11	L02	12	2015-05-07
IT13	L03	60	2015-05-09

Write following Queries using SQL statements

9. Find out the names of the tables you have created in your database.
10. Examine the structure of the table **item**.
11. Exit from MySQL server and log on again.
12. Retrieve all records from **item** table.
13. Retrieve all records from **location** table.
14. Retrieve all records from **store** table.
15. Retrieve **it_description** and **it_unit_price** from Item table
16. Retrieve the item codes from **store** table.
17. Retrieve the item codes without repetition from **store** table.
18. Retrieve item codes which are stored in the location **L01**.
19. List the *item descriptions* begin with letter T.
20. List the *item descriptions* end with **er.**
21. List the details of items of supplier Dell, HP and LG
22. Get the item code and the item name which supplier is not known.
23. Get the item code and the item name which supplier is known.
24. Retrieve all records from Item table where **unit_price** is greater than 20000.00.
25. Retrieve *description, stored quantity* and *location name* where *items unit_price* exceeds 20000.00.