**SQL Practical: Hotel Case Study**

In this practical, you will implement the Hotel database that has the following structure. First, create the relevant tables. Then for each table, add the necessary records. The script is provided to you (hotel.txt)

Write the appropriate SQL queries for the following:-

**Part I: Perform the following queries**

a. List full details of all hotels.

b. List full details of all hotels in London. (Hint: look for the string 'London' in the address field.)

c. List the names and addresses of all guests who live in London.

d. List the details for all double or family rooms with a price below $40.00 per night.

e. List all bookings for which no dateto value has been specified.

**Part II: Perform the following queries**

a. List the names and addresses of all guests who live in London, alphabetically ordered by name.

b. List the bookings for which no DateTo has been specified, in ascending order of DateFrom within HNo.

c. List the room numbers, hotel numbers and price of all rooms of type 'family' in descending order of price within ascending order of hotel number.

**Part III: Perform the following queries**

a. List the price and type of all rooms at the Grosvenor Hotel.

b. List datefrom and dateto for all bookings in rooms of type 'family'.

c. List the names and addresses of all guests who have stayed at the Grosvenor Hotel.

d. List the names and addresses of all guests who have stayed in a room of type 'family' in any hotel.

**Part IV: Perform the following queries**

a. How many hotels are there?

b. What is the average price of a family room?

c. What is the total possible revenue per night for the double rooms in the hotel with HNo 'H001'?

d. How many different guests were booked into hotels during April 1997? (Hint: check for bookings that start before 1 May 97 and finish after 31 March 97.

**Part V: For the date 26 March 1997, perform the following queries.**

a. Calculate the total income for the Grosvenor Hotel.

b. List the unoccupied rooms in the Grosvenor Hotel.

c. Calculate the lost income from unoccupied rooms at the Grosvenor Hotel.

d. List the details of all rooms in all hotels, including the name of any guests who were staying in the room.

**Part VI: Perform the following queries.**

a. List the number of rooms in each hotel in London.

b. List the number of rooms occupied on 26 March 1997 for each hotel.

c. What is the most commonly booked room type over all hotels?

d. What was the lost income from unoccupied rooms at each hotel on 26 March 1997?