6.7   List full details of all hotels.
       SELECT * FROM Hotel;

6.8   List full details of all hotels in London.
       SELECT * FROM Hotel WHERE city = 'London';

6.9   List the names and addresses of all guests in London, alphabetically ordered by name.
       SELECT guestName, guestAddress FROM Guest WHERE address LIKE '%London%'
       ORDER BY guestName;
Strictly speaking, this would also find rows with an address like: '10 London Avenue, New York'.

6.10   List all double or family rooms with a price below £40.00 per night, in ascending order of price.
       SELECT * FROM Room WHERE price < 40 AND type IN ('D', 'F')
       ORDER BY price;
       (Note, ASC is the default setting).

6.11   List the bookings for which no dateTo has been specified.
       SELECT * FROM Booking WHERE dateTo IS NULL;

Aggregate Functions

6.12   How many hotels are there?
       SELECT COUNT(*) FROM Hotel;

6.13   What is the average price of a room?
       SELECT AVG(price) FROM Room;

6.14   What is the total revenue per night from all double rooms?
       SELECT SUM(price) FROM Room WHERE type = 'D';

6.15   How many different guests have made bookings for August?
       SELECT COUNT(DISTINCT guestNo) FROM Booking
       WHERE (dateFrom <= DATE'2004-08-01' AND dateTo >= DATE'2004-08-01') OR
               (dateFrom >= DATE'2004-08-01' AND dateFrom <= DATE'2004-08-31');

Subqueries and Joins

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

SELECT price, type FROM Room

WHERE hotelNo =

(SELECT hotelNo FROM Hotel

WHERE hotelName = 'Grosvenor Hotel');

6.17   List all guests currently staying at the Grosvenor Hotel.

SELECT * FROM Guest

WHERE guestNo =

(SELECT guestNo FROM Booking

WHERE dateFrom <= CURRENT_DATE AND

dateTo >= CURRENT_DATE AND

hotelNo =

(SELECT hotelNo FROM Hotel

WHERE hotelName = 'Grosvenor Hotel'));

6.18   List the details of all rooms at the Grosvenor Hotel, including the name of the guest staying in the room, if the room is occupied.

SELECT r.* FROM Room r LEFT JOIN

(SELECT g.guestName, h.hotelNo, b.roomNo FROM Guest g, Booking b, Hotel h

WHERE g.guestNo = b.guestNo AND b.hotelNo = h.hotelNo AND

hotelName= 'Grosvenor Hotel' AND

dateFrom <= CURRENT_DATE AND

dateTo >= CURRENT_DATE) AS XXX

ON r.hotelNo = XXX.hotelNo AND r.roomNo = XXX.roomNo;

6.22   List the number of rooms in each hotel.

SELECT hotelNo, COUNT(roomNo) AS count FROM Room

GROUP BY hotelNo;

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

SELECT hotelNo, COUNT(roomNo) AS count FROM Room r, Hotel h

WHERE r.hotelNo = h.hotelNo AND city = 'London'

GROUP BY hotelNo;