```
Hotel(hotelNo, name, address)
Room(roomNo, hotelNo, type, price)
Booking(hotelNo, guestNo, dateFrom, dateTo, roomNo)
Guest(guestNo, name, address)
```

- List full details of all hotels.

SELECT * from Hotel;

- List full details of all hotels in London.

SELECT * from Hotel

WHERE address LIKE '%London%';

```
Hotel(hotelNo, name, address)
Room(roomNo, hotelNo, type, price)
Booking(hotelNo, guestNo, dateFrom, dateTo, roomNo)
Guest(guestNo, name, address)
```

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

SELECT name, address

FROM Guest

WHERE address LIKE '%London%'

ORDER BY name

```
Hotel(hotelNo, name, address)
Room(roomNo, hotelNo, type, price)
Booking(hotelNo, guestNo, dateFrom, dateTo, roomNo)
Guest(guestNo, name, address)
```

- List all double or family rooms with a price below 40.00 per night, in ascending order of price.

SELECT * FROM Room

WHERE (type = 'double' or type = 'family') AND
    price < 40

ORDER BY price;

```
Hotel(hotelNo, name, address)
Room(roomNo, hotelNo, type, price)
Booking(hotelNo, guestNo, dateFrom, dateTo, roomNo)
Guest(guestNo, name, address)
```

- List the bookings for which no dateTo has been specified.

SELECT * FROM Booking
WHERE dateTo IS NULL;

- How many hotels are there?

SELECT COUNT(*) FROM Hotel;

```
Hotel(hotelNo, name, address)
Room(roomNo, hotelNo, type, price)
Booking(hotelNo, guestNo, dateFrom, dateTo, roomNo)
Guest(guestNo, name, address)
```

- What is the average price of all the rooms?

SELECT AVG(price)

FROM Room;

```
Hotel(hotelNo, name, address)
Room(roomNo, hotelNo, type, price)
Booking(hotelNo, guestNo, dateFrom, dateTo, roomNo)
Guest(guestNo, name, address)
```

How many different guests have made bookings for August 2013 (inclusive)?

SELECT COUNT(DISTINCT guestNo)

FROM Booking

WHERE dateFrom >= '2013-08-01' AND

   dateTo <= '2013-08-31';

```
Hotel(hotelNo, name, address)
Room(roomNo, hotelNo, type, price)
Booking(hotelNo, guestNo, dateFrom, dateTo, roomNo)
Guest(guestNo, name, address)
```

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

SELECT price, type

FROM Hotel h, Room r

WHERE h.hotelNo = r.hotelNo AND

       h.name = 'Grosvenor Hotel';

```
Hotel(hotelNo, name, address)
Room(roomNo, hotelNo, type, price)
Booking(hotelNo, guestNo, dateFrom, dateTo, roomNo)
Guest(guestNo, name, address)
```

- List all guests currently staying at the Grosvenor Hotel.
  (`CURRENT_DATE()` function in MySQL)

SELECT g.guestNo, g.name, g.address
FROM Guest g, Booking b, Hotel h
WHERE h.hotelNo = b.hotelNo AND
          g.guestNo = b.guestNo AND
          h.name = 'Grosvenor Hotel' AND
          dateFrom <= CURRENT_DATE() AND
          dateTo > CURRENT_DATE();

```
Hotel(hotelNo, name, address)
Room(roomNo, hotelNo, type, price)
Booking(hotelNo, guestNo, dateFrom, dateTo, roomNo)
Guest(guestNo, name, address)
```

- 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.roomNo, r.type, r.price, g.name

FROM Guest g, Booking b, Hotel h, Room r

WHERE   h.hotelNo = b.hotelNo AND

g.guestNo = b.guestNo AND

r. roomNo = b.roomNo AND

r.hotelNo = b.hotelNo AND

h.name = 'Grosvenor Hotel' AND

dateFrom <= CURRENT_DATE()   AND

dateTo > CURRENT_DATE();

```
Hotel(hotelNo, name, address)
Room(roomNo, hotelNo, type, price)
Booking(hotelNo, guestNo, dateFrom, dateTo, roomNo)
Guest(guestNo, name, address)
```

- What is the total income from bookings for the Grosvenor Hotel today?

SELECT SUM(price)

FROM Booking b, Room r, Hotel h

WHERE r.hotelNo = h.hotelNo AND

  r.roomNo = b.roomNo AND

  (dateFrom <= CURRENT_DATE() AND

  dateTo > CURRENT_DATE()) AND

  h.name = 'Grosvenor Hotel';

```
Hotel(hotelNo, name, address)
Room(roomNo, hotelNo, type, price)
Booking(hotelNo, guestNo, dateFrom, dateTo, roomNo)
Guest(guestNo, name, address)
```

- List the rooms that are currently unoccupied at the Grosvenor Hotel.

SELECT *
FROM Room r, Hotel h
WHERE r.hotelNo = h.hotelNo
    AND h.name = 'Grosvenor Hotel'
    AND roomNo NOT IN
        (SELECT roomNo FROM Booking b, Hotel h
        WHERE (dateFrom <= CURRENT_DATE AND
            dateTo > CURRENT_DATE) AND
            b.hotelNo = h.hotelNo AND
            h.name = 'Grosvenor Hotel');

```
Hotel(hotelNo, name, address)
Room(roomNo, hotelNo, type, price)
Booking(hotelNo, guestNo, dateFrom, dateTo, roomNo)
Guest(guestNo, name, address)
```

- What is the lost income from unoccupied rooms at the Grosvenor Hotel?

SELECT SUM(price)

FROM Room r, Hotel h

WHERE r.hotelNo = h.hotelNo

    AND h.name = 'Grosvenor Hotel'

    AND roomNo NOT IN

        (SELECT roomNo FROM Booking b, Hotel h

        WHERE (dateFrom <= CURRENT_DATE AND

            dateTo > CURRENT_DATE) AND

            b.hotelNo = h.hotelNo AND

            h.name = 'Grosvenor Hotel');