

Lab 3

Using the Object Explorer, first create the Hotel schema defined at the start of the Exercises at the end of Chapter 4 and add some sample data to these tables. If already created, then ignore this step.

Hotel (hotelNo, hotelName, city)
Room (roomNo, hotelNo, type, price)
Booking (hotelNo, guestNo, dateFrom, dateTo, roomNo)
Guest (guestNo, guestName, guestAddress)

1) List full details of all hotels.

ANS:

```
SELECT * FROM hotel
```

2) List full details of all hotels in Fairfield.

ANS:

```
SELECT * FROM hotel WHERE city='fairfield'
```

3) List the names and addresses of all guests in Fairfield, alphabetically ordered by name.

ANS:

```
SELECT guestName, guestaddress FROM guest ORDER BY guestName;
```

4) List all double or family rooms with a price below \$50.00 per night, in ascending order of price.

ANS:

```
*SELECT * FROM room WHERE (type='double' OR type='family') AND price <50 ORDER BY price
```

5) List the bookings for which no dateTo has been specified.

ANS:

```
SELECT * FROM booking WHERE dateTo is NULL;
```

6) How many hotels are there?

ANS:

```
SELECT COUNT(*) AS hotelCount FROM hotel
```

7) What is the average price of a room?

ANS:

```
SELECT AVG(price) AS averagePrice FROM room
```

8) What is the total revenue per night from all double rooms?

ANS:

```
SELECT SUM(price) FROM room Where type='double'
```

9) How many different guests have made bookings for August?

ANS:

```
SELECT COUNT(DISTINCT guestNo) AS differentGuest FROM booking WHERE dateFrom > '2019-10-10' AND dateTo < '2019-10-28'
```

10) List the number of rooms in each hotel.

ANS:

```
SELECT hotelName, COUNT(roomNo) AS numberOfRoom FROM hotel h, room r WHERE h.hotelNo=r.hotelNo group BY hotelName
```

11) List the number of rooms in each hotel in Fairfield.

ANS:

```
SELECT h.hotelName, COUNT(roomNo) AS numberOfrooms FROM room r, hotel h WHERE r.hotelNo=h.hotelNo AND h.city='fairfield' GROUP BY hotelName;
```

12) What is the total number of bookings for each hotel in September 2018?

ANS:

```
SELECT hotelName, count(hotelName) as bookedRooms FROM booking b, hotel h where b.hotelNo = h.hotelNo AND (dateFrom > '2019-10-10' AND dateTO < '2019-11-10') group by hotelName;
```