

## Database Homework 4

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1) 6.7

```
SELECT * FROM Hotel;
```

2) 6.10

```
SELECT h.hotelNo, r.roomNo, price
FROM Hotel h, Room r
WHERE h.hotelNo = r.hotelNo and type IN ('double', 'family')
      and price < 40.00
ORDER BY price;
```

3) 6.12

```
SELECT COUNT(*) AS HotelCount FROM Hotel;
```

4) 6.15

```
SELECT COUNT(DISTINCT g.guestNo) AS GuestsCountInAugust
FROM Guest g, Booking b
WHERE g.guestNo = b.guestNo
      AND (dateFrom BETWEEN '01-Aug-15' AND '31-Aug-15'
            OR dateTo BETWEEN '01-Aug-15' AND '31-Aug-15');
```

5) 6.17

Assume today is the date of 31-Oct-15

```
SELECT g.*
FROM Guest g, Booking b, Hotel h
WHERE g.guestNo = b.guestNo AND b.hotelNo = h.hotelNo
      AND hotelName = 'Grosvenor'
      AND (dateFrom <= '31-Oct-15' AND dateTo >= '31-Oct-15');
```

6) 6.19

Assume today is the date of 31-Oct-15

```
SELECT SUM(price) AS TotalIncome
FROM Booking b, Hotel h, Room r
WHERE b.hotelNo = h.hotelNo AND h.hotelName = 'Grosvenor'
      AND b.roomNo = r.roomNo
      AND (dateFrom <= '31-Oct-15' AND dateTo >= '31-Oct-15');
```

7) 6.23

```
SELECT h.hotelNo, COUNT(r.roomNo) AS roomCnt
FROM Hotel h, Room r
WHERE h.hotelNo = r.hotelNo AND city = 'London'
GROUP BY h.hotelNo;
```

8) 6.25

```
SELECT hotelNo, type, MAX(bookingCnt)
FROM (
    SELECT h.hotelNo, type, COUNT(type) AS bookingCnt
    FROM Hotel h, Room r, Booking b
    WHERE b.hotelNo = h.hotelNo AND city = 'London'
        AND r.roomNo = b.roomNo AND r.hotelNo = b.hotelNo
    GROUP BY h.hotelNo, type
)
GROUP BY hotelNo;
```

9) 6.27

```
INSERT INTO Hotel
VALUES ('H005', 'Eagle', 'Atlanta');
```

```
INSERT INTO Room
VALUES ('R007', 'H005', 'double', 40);
```

```
INSERT INTO Booking
VALUES ('H005', 'G099', '31-Oct-15', '1-Nov-15', 'R007');
```

```
INSERT INTO Guest
VALUES ('G099', 'Chao Chen', '5100 Evergreen ST Apt 111');
```

10) 6.28

```
UPDATE Room
SET price = price * 1.05;
```