**SQL>**

**SQL> -- COMP 2714**

**SQL> -- SET 2B**

**SQL> -- Assignment ASN02**

**SQL> -- Nguyen, Vu Phuong Quynh (Billy) A01181323**

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**SQL>**

**SQL> ALTER SESSION SET NLS\_DATE\_FORMAT='YYYY-MM-DD';**

**Session altered.**

**SQL> SELECT SYSDATE**

**2 FROM DUAL;**

**SYSDATE**

**----------**

**2020-01-18**

**SQL>**

**SQL> -- Q1. List hotelName, hotelAddressm, room type, and price of all Single, DOuble, or Family   
--rooms in city Paris in France with a price below 100.00 per night, in descending order of   
--hotelName, ascending order of price and descending order of type once.**

**SQL> SELECT DISTINCT h.hotelName, h.hotelAddress, r.type, r.price**

**2 FROM Hotel h**

**3 INNER JOIN Room r**

**4 ON h.hotelNo = r.hotelNo**

**5 WHERE h.hotelAddress LIKE '%Paris%'**

**6 AND (h.country = 'France')**

**7 AND ((r.type = 'Single')**

**8 OR (r.type = 'Double')**

**9 OR (r.type = 'Family'))**

**10 AND (r.price < 100.00)**

**11 ORDER BY h.hotelName DESC,**

**12 r.price ASC,**

**13 r.price DESC;**

**HOTELNAME HOTELADDRESS TYPE PRICE**

**---------------- ---------------------------------------- -------- ----------**

**Holiday Inn 56 Rue Bonaparte, Paris Single 35**

**Holiday Inn 56 Rue Bonaparte, Paris Double 50**

**Grosvenor Hotel 100 Rue St. Dominique, Paris Single 40**

**Grosvenor Hotel 100 Rue St. Dominique, Paris Double 55**

**Grosvenor Hotel 100 Rue St. Dominique, Paris Family 85**

**Grosvenor Hotel 100 Rue St. Dominique, Paris Family 90**

**6 rows selected.**

**SQL>**

**SQL> -- Q2. List the hotelName, hotelAddress, roomNo, dateFrom and dateTo, where no dateTo has been specified in city Surrey in Canada**

**SQL> SELECT hotelName, hotelAddress, roomNo, dateFrom, dateTo**

**2 FROM Hotel h**

**3 INNER JOIN Booking b**

**4 ON h.hotelNo = b.hotelNo**

**5 WHERE country = 'Canada'**

**6 AND hotelAddress LIKE '%Surrey%'**

**7 AND hotelAddress NOT LIKE '%North Surrey%'**

**8 AND hotelAddress NOT LIKE '%South Surrey%'**

**9 AND country = 'Canada'**

**10 AND dateTo IS NULL;**

**HOTELNAME HOTELADDRESS ROOMNO DATEFROM DATETO**

**---------------- ---------------------------------------- ---------- ---------- ----------**

**Holiday Hotel 789 Paris St.,Surrey 10 2020-01-21**

**SQL>**

**SQL> -- Q3a. List the average price of a room for each hotel. List it with hotelName and in hotelName order.**

**SQL> SELECT hotelName, AVG(price) AS AveragePrice**

**2 FROM Hotel h**

**3 INNER JOIN Room r**

**4 ON h.HotelNo = r.hotelNo**

**5 GROUP BY hotelName**

**6 ORDER BY hotelName;**

**HOTELNAME AVERAGEPRICE**

**---------------- ------------**

**Delta Inn 75**

**Grosvenor Hotel 69.6153846**

**Grosvenor Inn 105**

**Holiday Hotel 100.833333**

**Holiday Inn 41.4285714**

**Imperial Palace 115**

**Park Royal Hotel 67**

**The Ramada 162.5**

**8 rows selected.**

**SQL>**

**SQL> -- Q3b. List the average price of a room for each hotel in each country that is not Deluxe. List with the country and hotelName, and in the country then hotelName order.**

**SQL> SELECT country, hotelName, AVG(price) AS AveragePrice**

**2 FROM Hotel h**

**3 INNER JOIN Room r**

**4 ON h.hotelNo = r.hotelNo**

**5 WHERE type <> 'Deluxe'**

**6 GROUP BY country, hotelName**

**7 ORDER BY country, hotelName;**

**COUNTRY HOTELNAME AVERAGEPRICE**

**-------------------- ---------------- ------------**

**Canada Delta Inn 75**

**Canada Grosvenor Inn 88.3333333**

**Canada Holiday Hotel 84.4444444**

**Canada Imperial Palace 100**

**Canada Park Royal Hotel 67**

**France Grosvenor Hotel 55.5**

**France Holiday Inn 41.4285714**

**USA The Ramada 127.272727**

**8 rows selected.**

**SQL>**

**SQL> -- Q4. List the total Revenue with the hotelName, and only if the total revenue if between $500 to $1000. List in hotelName order**

**SQL> SELECT hotelName, SUM(price) AS Revenue**

**2 FROM Hotel h**

**3 INNER JOIN Room r**

**4 ON h.hotelNo = r.hotelNo**

**5 WHERE r.type = 'Double'**

**6 GROUP BY h.hotelName**

**7 HAVING SUM(price) BETWEEN 500 AND 1000**

**8 ORDER BY Revenue DESC;**

**HOTELNAME REVENUE**

**---------------- ----------**

**Delta Inn 900**

**Park Royal Hotel 688**

**The Ramada 600**

**SQL>**

**SQL> -- Q5. List the type, price, numbers of rooms for each possible combination of type and price of all rooms at the hotels with ‘Grosvenor’ in name. List only if the number of rooms for each type is greater than 3.**

**SQL> SELECT DISTINCT hotelName, type, price, COUNT(\*) AS Combinations**

**2 FROM Hotel h**

**3 INNER JOIN Room r**

**4 ON h.hotelNo = r.hotelNo**

**5 WHERE h.hotelName LIKE '%Grosvenor%'**

**6 GROUP BY h.hotelName, r.type, r.price**

**7 HAVING COUNT(\*) > 3;**

**HOTELNAME TYPE PRICE COMBINATIONS**

**---------------- -------- ---------- ------------**

**Grosvenor Inn Deluxe 155 5**

**Grosvenor Inn Family 125 5**

**Grosvenor Hotel Double 55 4**

**Grosvenor Inn Single 45 5**

**Grosvenor Hotel Single 40 4**

**Grosvenor Inn Double 95 5**

**6 rows selected.**

**SQL>**

**SQL> -- Q6. List the roomNo and all guest information currently staying at the Grosvenor Hotel.**

**SQL> SELECT roomNo, g.guestNo, guestName, guestAddress, g.country**

**2 FROM Booking b**

**3 INNER JOIN Guest g**

**4 ON b.guestNo = g.guestNo**

**5 INNER JOIN Hotel h**

**6 ON b.hotelNo = h.hotelNo**

**7 WHERE dateFrom <= DATE'2020-01-21' AND**

**8 (dateTo IS NULL OR dateTo >= DATE'2020-01-21')**

**9 AND hotelName LIKE '%Grosvenor Hotel%';**

**ROOMNO GUESTNO GUESTNAME GUESTADDRESS COUNTRY**

**---------- ---------- --------------- ---------------------------------------- --------------------**

**7 5 Rick Hamilton 987 King Edward Road, Paris France**

**4 12 Sundeep Mohan 1000 Victoria Avenue, Paris France**

**SQL>**

**SQL> -- Q7. List the total income from Bookings with ‘Grosvenor’ in name today.**

**SQL> SELECT hotelName, SUM(price) AS Income**

**2 FROM Booking b**

**3 INNER JOIN Room r**

**4 ON b.roomNo = r.roomNo**

**5 INNER JOIN Hotel h**

**6 ON b.hotelNo = h.hotelNo**

**7 WHERE h.hotelName LIKE '%Grosvenor%'**

**8 AND dateFROM = DATE'2020-01-21'**

**9 GROUP BY h.hotelName**

**10 ORDER By h.hotelName;**

**HOTELNAME INCOME**

**---------------- ----------**

**Grosvenor Hotel 553**

**SQL>**

**SQL> -- Q8. List hotelNo, hotelName, type, total income of each room type from bookings for each hotel today. With an ascending order of hotelName and type.**

**SQL> SELECT DISTINCT b.hotelNo, hotelName, type, SUM(price) AS Income**

**2 FROM Booking b**

**3 INNER JOIN Hotel h**

**4 ON b.HotelNo = h.hotelNo**

**5 INNER JOIN Room r**

**6 ON b.roomNo = r.roomNo**

**7 WHERE dateFrom <= DATE'2020-01-21' AND**

**8 (dateTo IS NULL OR dateTo >= DATE'2020-01-21')**

**9 AND hotelName LIKE '%Grosvenor%'**

**10 GROUP BY b.hotelNo, hotelName, type**

**11 ORDER BY hotelName ASC,**

**12 type ASC;**

**HOTELNO HOTELNAME TYPE INCOME**

**---------- ---------------- -------- ----------**

**1 Grosvenor Hotel Double 560**

**1 Grosvenor Hotel Family 495**

**1 Grosvenor Hotel Single 206**

**8 Grosvenor Inn Double 430**

**8 Grosvenor Inn Single 123**

**SQL>**

**SQL> -- Q9. List the new hotels that are still under construction.**

**SQL> SELECT h.hotelNo, hotelName, hotelAddress, country**

**2 FROM Hotel h**

**3 LEFT JOIN Room r**

**4 ON h.hotelNo = r.hotelNo**

**5 WHERE r.hotelNo IS NULL**

**6 AND (roomNo IS NULL)**

**7 AND (type IS NULL)**

**8 AND (price IS NULL);**

**HOTELNO HOTELNAME HOTELADDRESS COUNTRY**

**---------- ---------------- ---------------------------------------- --------------------**

**10 Olympic Resort 223 Olympic Street, Whistler Canada**

**11 Romantic Hotel 223 Rue Cler, Paris France**

**9 Royale Paris 500 Avenue Montaigne, Paris France**

**SQL>**

**SQL> -- Q10. List total the number of Hotels, the number of hotels completed, the number of hotels under construction, and the percentage of hotels under construction**

**SQL> SELECT COUNT(DISTINCT h.hotelName) AS ALL\_HOTELS, (COUNT(DISTINCT r.hotelNo)) AS COMPLETED,**

**2 (COUNT(DISTINCT h.hotelName) - COUNT(DISTINCT r.hotelNo)) AS UNDERCONSTR, (((COUNT(DISTINCT h.hotelName) - COUNT(DISTINCT r.hotelNo)) / COUNT(DISTINCT h.hotelName)) \* 100) AS PERCENT\_UNDERCONSTR**

**3 FROM Hotel h**

**4 FULL JOIN Room r**

**5 ON h.hotelNo = r.hotelNo**

**6 WHERE r.hotelNo IS NOT NULL**

**7 OR (r.hotelNo IS NULL**

**8 AND (roomNo IS NULL)**

**9 AND (type IS NULL)**

**10 AND (price IS NULL));**

**ALL\_HOTELS COMPLETED UNDERCONSTR PERCENT\_UNDERCONSTR**

**---------- ---------- ----------- -------------------**

**11 8 3 27.2727273**

**SQL>**

**SQL> SPOOL OFF**