**SQL> --**

**SQL> -- ---------------------------------------------------------**

**SQL> -- The following comments will also be sent / spooled to the**

**SQL> -- output text file to identify the ownership of the**

**SQL> -- Oracle SQL\*Plus work.**

**SQL> --**

**SQL> -- COMP 2714**

**SQL> -- SET 2D**

**SQL> -- Assignment Asn02**

**SQL> --**

**SQL> -- Zhang, Yuanyuan A00993606**

**SQL> -- email: yuanyuanzhang1104@gmail.com**

**SQL> --**

**SQL> -- Chang, Chih-Hsi A01017955**

**SQL> -- email: cchang189@my.bcit.ca**

**SQL> --**

**SQL> -- ---------------------------------------------------------**

**SQL> --**

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

**Session altered.**

**SQL> --**

**SQL> SELECT SYSDATE**

**2 FROM DUAL;**

**SYSDATE**

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

**2018-01-25**

**SQL> -- Q1. Select specific room list.**

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

**2 FROM Hotel h**

**3 JOIN Room r**

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

**5 WHERE h.hotelAddress LIKE '%, London'**

**6 AND r.price < 100.00**

**7 ORDER BY h.hotelName DESC, r.price ASC, r.type DESC**

**8 ;**

**HOTELNAME HOTELADDRESS TYPE PRICE**

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

**Holiday Inn 56 Edinburg Square, London Single 35**

**Holiday Inn 56 Edinburg Square, London Double 50**

**Grosvenor Hotel 100 Oxford Road, London Single 40**

**Grosvenor Hotel 100 Oxford Road, London Double 55**

**Grosvenor Hotel 100 Oxford Road, London Family 85**

**Grosvenor Hotel 100 Oxford Road, London Family 90**

**6 rows selected.**

**SQL> -- Q2. List the booking which dateTo is NULL.**

**SQL> SELECT h.hotelName, h.hotelAddress, b.roomNo, b.dateFrom ,b.dateTo**

**2 FROM Hotel h**

**3 JOIN Booking b**

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

**5 WHERE h.hotelAddress LIKE '%, Vancouver'**

**6 AND b.dateTo IS NULL**

**7 ;**

**HOTELNAME HOTELADDRESS ROOMNO DATEFROM**

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

**DATETO**

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

**Meridian Hotel 789 Howe Street, Vancouver 10 2018-01-21**

**SQL> -- Q3. List the average room price for each hotel.**

**SQL> SELECT h.hotelName, AVG(r.price)**

**2 FROM Hotel h**

**3 JOIN Room r**

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

**5 GROUP BY h.hotelName**

**6 ORDER BY h.hotelName ASC**

**7 ;**

**HOTELNAME AVG(R.PRICE)**

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

**Delta Inn 75**

**Grosvenor Hotel 69.6153846**

**Grosvenor Inn 105**

**Holiday Inn 41.4285714**

**Imperial Palace 115**

**Meridian Hotel 100.833333**

**Park Royal Hotel 67**

**The Ramada 162.5**

**8 rows selected.**

**SQL> -- Q4. List the revenue for each hotel.**

**SQL> SELECT h.hotelName, SUM(r.price) AS totalRevenue**

**2 FROM Hotel h**

**3 JOIN Room r**

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

**5 GROUP BY h.hotelName**

**6 HAVING SUM(r.price) BETWEEN 500 AND 1000**

**7 ;**

**HOTELNAME TOTALREVENUE**

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

**Holiday Inn 580**

**Delta Inn 900**

**Grosvenor Hotel 905**

**SQL> -- Q5. List the number of rooms for each type and price.**

**SQL> -- combination is greater than 3**

**SQL> SELECT r.type, r.price, COUNT(\*) AS numberOfRooms**

**2 FROM Hotel h**

**3 JOIN Room r**

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

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

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

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

**8 ;**

**TYPE PRICE NUMBEROFROOMS**

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

**Double 55 4**

**Double 95 5**

**Family 125 5**

**Single 40 4**

**Deluxe 155 5**

**Single 45 5**

**6 rows selected.**

**SQL> -- Q6. List all guests currently staying at the Grosvenor Hotel.**

**SQL> SELECT g.guestName, g.guestAddress, b.roomNo**

**2 FROM Hotel h**

**3 JOIN Booking b**

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

**5 JOIN Guest g**

**6 ON b.guestNo = G.guestNo**

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

**8 AND b.dateFrom <= DATE'2018-01-29'**

**9 AND (b.dateTo IS NULL OR b.dateTo >= Date'2018-01-29')**

**10 ;**

**GUESTNAME GUESTADDRESS ROOMNO**

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

**Peter Kennedy 20 Austin Drive, London 5**

**Sundeep Mohan 1000 Victoria Avenue, London 4**

**Ivan Pratt 20 Lincoln Square, London 3**

**SQL> -- Q7. Calculate the income for each of the hotels**

**SQL> -- with 'Grosvenor' in name.**

**SQL> SELECT h.hotelName, SUM(r.price) AS income**

**2 FROM Hotel h**

**3 JOIN Room r**

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

**5 JOIN Booking b**

**6 ON r.hotelNo = b.hotelNo**

**7 AND r.roomNo = b.roomNo**

**8 WHERE h.hotelName like '%Grosvenor%'**

**9 AND b.dateFrom <= DATE'2018-01-29'**

**10 AND (b.dateTo IS NULL OR b.dateTo >= Date'2018-01-29')**

**11 GROUP BY h.hotelName**

**12 ;**

**HOTELNAME INCOME**

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

**Grosvenor Inn 95**

**Grosvenor Hotel 135**

**SQL> -- Q8. Calculate the income for each room type of each hotel.**

**SQL> SELECT h.hotelName, r.type, SUM(r.price) AS income**

**2 FROM Hotel h**

**3 JOIN Room r**

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

**5 JOIN Booking b**

**6 ON r.hotelNo = b.hotelNo**

**7 AND r.roomNo = b.roomNo**

**8 WHERE b.dateFrom <= DATE'2018-01-29'**

**9 AND (b.dateTo IS NULL OR b.dateTo >= Date'2018-01-29')**

**10 GROUP BY h.hotelName, r.type**

**11 ORDER BY h.hotelName ASC, r.type ASC**

**12 ;**

**HOTELNAME TYPE INCOME**

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

**Grosvenor Hotel Double 55**

**Grosvenor Hotel Single 80**

**Grosvenor Inn Double 95**

**Holiday Inn Single 35**

**Meridian Hotel Deluxe 150**

**SQL> -- Q9. List the new hotels.**

**SQL> SELECT h.hotelName**

**2 FROM Hotel h**

**3 LEFT JOIN Room r**

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

**5 GROUP BY h.hotelName**

**6 HAVING COUNT(r.roomNO) = 0**

**7 ;**

**HOTELNAME**

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

**Olympic Resort**

**Royale London**

**SQL> -- Q10. Hotel states.**

**SQL> SELECT**

**2 COUNT(DISTINCT h.hotelName)**

**3 AS "Total\_number"**

**4 ,COUNT(DISTINCT h.hotelName) - (COUNT(\*) - COUNT(r.roomNO))**

**5 AS "Completed"**

**6 ,COUNT(\*) - COUNT(r.roomNO)**

**7 AS "Under\_construction"**

**8 ,(COUNT(\*) - COUNT(r.roomNO)) \* 100 / COUNT(DISTINCT h.hotelName)**

**9 AS "%Under\_construction"**

**10 FROM Hotel h**

**11 LEFT JOIN Room r**

**12 ON h.hotelNo = r.hotelNo**

**13 ;**

**Total\_number Completed Under\_construction %Under\_construction**

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

**10 8 2 20**

**SQL> --**

**SQL> SPOOL OFF**