Practical 6: Displaying data from Multiple Tables (join)

TABLE: **SALESMEN**

Column Name	**Data Type**	**Size**	**Attributes**
SNUM	Varchar2	6	Primary key/first letter must start with 'S'
SNAME	Varchar2	20	Not null
CITY	Varchar2	15	
COMM	Number	5,2	

SNUM	**SNAME**	**CITY**	**COMM**
S1001	Piyush	London	0.12
S1002	Niraj	San jose	0.13
S1003	Miti	London	0.11
S1004	Rajesh	Barcelona	0.15
S1005	Haresh	New york	0.10
S1006	Ram	Bombay	0.10
S1007	Nehal	Delhi	0.09

TABLE: **CUSTOMER**

Column Name	**Data Type**	**Size**	**Attributes**
CNUM	Varchar2	6	Primary key/first letter must start with 'C'
CNAME	Varchar2	20	Not null
CITY	Varchar2	15	
RATING	Number	5	
SNUM	Varchar2	6	

CNUM	**CNAME**	**CITY**	**RATING**	**SNUM**
C2001	Hardik	London	100	S1001
C2002	Geeta	Rome	200	S1003
C2003	Kavish	San jose	200	S1002
C2004	Dhruv	Berlin	300	S1002
C2005	Pratham	London	100	S1001
C2006	Vyomesh	San jose	300	S1007
C2007	Kirit	Rome	100	S1004

TABLE: **ORDER**

Column Name	**Data Type**	**Size**	**Attributes**
ONUM	Varchar2	6	Primary key/first letter must start with 'O'
AMT	Number	10,2	Not null
ODATE	Date		
CNUM	Varchar2	6	
SNUM	Varchar2	6	

ONUM	**AMT**	**ODATE**	**CNUM**	**SNUM**
O3001	18.69	10-Mar-90	C2008	S1007
O3003	767.19	10-Mar-90	C2001	S1001
O3002	1900.10	03-Oct-90	C2007	S1004
O3005	5160.45	04-Oct-90	C2003	S1002
O3006	1098.16	10-Mar_90	C2008	S1007
O3009	1713.23	10-April-90	C2002	S1003
O3007	75.75	10-April-90	C2004	S1002
O3008	4723.00	10-May-90	C2006	S1001
O3010	1309.95	10-May-90	C2004	S1002
O3011	9891.88	10-June-90	C2006	S1001

Perform following queries.

SELECT

1. Display all the information of salesmen.
2. Display snum,sname,city from salesmen table.
3. Display odate,snum,onum and amt from orders.
4. Display the information of orders without duplication.
5. List of sname, city from salesmen where city is 'LONDON'.
6. List all records of customers where rating is equal to 100.
7. Write a select command that produces the order number,amount and date for all rows in the order table.
8. Produces all rows from the customer table for which the salesperson's number is S1001.
9. Display the salesperson table with the column in the following order: city,sname,snum,comm.
10. Write a select command that produces the rating followed by the name of each customer in SAN JOSE.
11. Display SNUM values of all salesmen without any repeat.

OPERATORS

12. List all customers with a rating above 200.
13. List all customers in SAN JOSE who have a rating above 200.
14. List all customers who were either located in SAN JOSE or had a rating above 200.
15. List of all customers who were either located in SAN JOSE or not rating above 200.
16. List of all customers who were not located in SAN JOSE or rating is not above 200.
17. Write a query that will give you all orders for more than $1000.
18. Write a query that will give you the names and cities of all salesmen in LONDON with a commission above 0.10.
19. Write a query on the customers table whose output will exclude all customers with a rating <= 100 and they are located in ROME.

SPECIAL OPERATORS

20. Display all salesmen that were located in either BARCELONA or LONDON(use IN keyword).
21. Find all customers matched with salesmen S1001,S1007 and S1004.
22. Display all salesmen with commission between 0.10 and 0.12.
23. Select all customers whose names fall in a 'A' and 'G' alphabetical.

LIKE OPERATORS.

24. List all the customers whose names begin with 'G'.
25. List all salesmen whose sname start with letter 'P' and end letter is 'H'.

NULL OPERATORS.

26. Find all records in customer table with NULL values in the city column.
27. Write a two queries that will produce all orders taken on October 3rd or 4th ,1990 (use IN operator and Use BETWEEN operator)
28. Write a query that selects all of the customers matched with S1001 and S1002.
29. Write a query that will produce all of the customers whose names begin with a letter from A to H.
30. Write a query that selects all customers whose names begin with 'C'.
31. Write a query that selects all orders without ZEROS or NULLS in amt field..

FUNCTIONS

32. Display sum of amt,average of orders.
33. To count the numbers of salesmen without duplication in the orders tables.
34. Count the rating of customers (with NULL and without NULL).
35. Find the largest order taken by each salesperson.(hint: use group by)
36. Find the largest order taken by each salesperson on each date.
37. Find out which day had the higher total amount ordered.
38. Write a query that counts all orders for October 3rd.
39. Write a query that counts the number of different non-NULL city in the customer table.
40. Write a query that selects the first customer in alphabetical order whose name begin with 'G'.

41. write a query that selects each customers smallest order.
42. Write a query that selects the highest rating in each city.
43. Write a query that counts the number of salesmen registering orders for each day(if a salesperson has more than one order on a given day , he or she should be counted only once)
44. Display all the information in descending orders(use column CNUM).
45. Display all the information in descending orders(use column CNUM,AMT).
46. Display sname and comm. From salesmen in descending order(in place of column name use column number).
47. Assume each salesperson has a 0.12 commission. Write a query on the orders table that will produce the order number,the salesperson number and the amount of the salesperson's commission for that order.
48. Write a query on the customers table that will find the highest rating in each city. Put the output in this form.
    For the city (city) , the highest rating is: (rating).
49. Write a query that lists customers in descending order of rating. Output the rating field first, followed by the customer's name and number.
50. Write a query that totals the orders for each day and places the results in descending order.

JOIN

51. Show the names of all customers matched with the salesmen serving them.
52. Write a query that lists each order number followed by the name of the customer who made the order.
53. Write a query that gives the names of both the salesperson and the customer for each order after the order number.
54. Write a query that produces all customers serviced by salesmen with a commission above 0.12. Output the customer's name, the salesperson's name and the salesperson's rate of commission.
55. Write a query that calculates the amount of the salesperson's commission on each order by a customer with a rating above 100.

OTHERS

56. List all customer located in cities where salesperson 'PIYUSH' has customer.
57. List all salesmen who are living in same city without duplicate rows.
58. Extract all orders of 'PIYUSH'.
59. Extract all orders of LONDON'S salesmen.
60. Find all customers whose cnum is 1000 above than the snum of 'PIYUSH'.
61. Count the no. of customers with the rating above than average Rating of 'LONDON'.
62. Produce the name and rating of all customers who have above average Rating.
63. List all salesmen with customers located in their cities.
64. Select all customers whose rating doesn't match with any rating customer of 'SAN JOSE'.
65. Create a union of two queries that shows the names,cities and ratings of all customers. Those with rating of >=200 should display 'HIGH RATING' and those with <200 should display 'LOW RATING'.
66. Find all customers with orders on 3rd october 1990 using correlate sub query.
67. Find all customers having rating greater than any customer in 'ROME'.
68. Insert a row into salesmen table with the values snum is s1008,salesmen name is 'RAKESH', city is unknown and commission is 14%.
69. Create another table London_staff having same structure as salesmen table.
70. Delete all orders from customer 'PIYUSH' from the order table.
71. Set the ratings of all the customers of PIYUSH to 400.
72. Increase the rating of all the customers in ROME by 100.
73. Double the commission of all salesmen of LONDON.
74. Set ratings for all customers in LONDON to NULL.
75. Delete all salesmen who have at least one customer with a rating of 100 from salesmen table.