

**H. N. G. University, Patan**  
**M.Sc.(CA & IT) – Semester - III**  
**305: Database Management System [Practical List]**

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Create following Three Tables.

1. Salesman

SNUM	SNAME	CITY	COMMITION
1001	PIYUSH	LONDON	12%
1002	NIRAJ	SURAT	13%
1003	MITI	LONDON	11%
1004	RAJESH	BARODA	15%
1005	ANAND	NEW DELHI	10%
1006	RAM	PATAN	10%
1007	LAXMAN	BOMBAY	09%

SNUM : A Unique number assign to each salesman.

SNAME : The name of salesman.

CITY : The location of salesman.

COMMITION: The salesman commission on order.

2. Customer

CNUM	CNAME	CITY	RATING	SNUM
2001	HARDIK	LONDON	100	1001
2002	GITA	ROME	200	1003
2003	LAXIT	SURAT	200	1002
2004	GOVIND	BOMBAY	300	1002
2005	CHANDRESH	LONDON	100	1001
2006	CHAMPAK	SURAT	300	1007
2007	PRATIK	ROME	100	1004
2008	MANOJ	LONDON	200	1007

CNUM : A Unique number assign to each customer.

CNAME : The name of customer.

CITY : The location of customer.

RATING : A level of preference indicator given to this customer.

SNUM : A salesman number assign to this customer.

3. Order

ONUM	AMOUNT	ODATE	CNUM	SNUM
3001	18.69	03/03/99	2007	1007
3002	767.19	05/03/97	2001	1001
3003	1900.10	10/03/97	2007	1004
3004	5160.45	12/03/99	2003	1002
3005	1098.25	15/04/99	2008	1007
3006	1713.12	10/04/95	2002	1003
3007	75.75	20/05/96	2004	1002
3008	4723.00	30/05/99	2006	1001
3009	1309.95	08/05/97	2004	1002
3010	9898.87	06/06/99	2006	1001

ONUM : A Unique number assign to each Order.

AMOUNT : Amount of order in Rs.

ODATE : The date of order.

CNUM : The number of customer making the order.

SNUM : The number of salesman credited with the sale.

**Solve following request with the help of sql query.**

1. Produce the order no, amount and date of all orders.
2. Give all the information about all the customers with salesman number 1001.
3. Display the information in the sequence of city, sname, snum, and Commission.
4. List of rating followed by the name of each customer in Surat.
5. List of snum of all salesmen with orders from order table.
6. List of all orders for more than Rs. 1000.
7. List out names and cities of all salesmen in London with commission above 10%
8. List all customers excluding those with rating  $\leq 100$  or they are located in Rome.
9. List all order for more than Rs. 1000 except the orders of snum 1006 of 10/03/97
10. List all orders taken on March 3rd or 4th or 6th.
11. List all customers whose names begins with a letter 'C'.
12. List all customers whose names begins with letter 'A' or 'B' or 'c'.
13. List all orders with zero or NULL amount.
14. Find out the largest orders of salesman 1002 and 1007.
15. Count all orders of 10-Mar-97.
16. Calculate the total amount ordered.
17. Calculate the average amount ordered.
18. Count the no. of salesmen currently having orders.
19. Find the largest order taken by each salesman.
20. Find the largest order taken by each salesman on 10/03/1997.
21. Count the no. of different non NULL cities in the Customer table.
22. Find out each customer's smallest order.
23. Find out the customer in alphabetical order whose name begins with 'G'
24. Count the no. of salesmen registering orders for each day.
25. List all salesmen with their amount calculated with commission.
26. Display the no. of order for each day in the following format.  
FOR dd-mon-yy, there are \_\_\_\_\_ Orders.
27. Assume each salesperson has a 12% commission. Write a query on the order table that will produce the order number, salesman no and calculated amount of commission for that order.
28. Find the highest rating in each city in the following format:  
Highest rating \_\_\_\_\_ is in the city \_\_\_\_\_  
Lowest rating \_\_\_\_\_ is in the city \_\_\_\_\_
29. List all customers in descending order of rating.
30. Calculate the total of orders for each day.
31. Show the name of all customers with their relational salesman's name.
32. List all customers and salesmen who shared a same city.
33. List all orders with the names of their customer and salesman.
34. List all orders by the customers not located in the same city as their salesman.
35. List all customers serviced by salesman with commission above 12%.
36. Calculate the amount of the salesman commission on each order by customer with rating above 100.
37. Find all pairs of customers having the same rating without duplication.
38. List all customers located in cities where salesman Niraj has customers.
39. Find all pairs of customers served by a single salesman with the salesman's name and no.
40. List all salesmen who are living in the same city with out duplicate
41. Produce the name and city of all the customers with the same rating as 'Hardik'.
42. Extract all orders of Miti.
43. Extract all orders of Baroda's salesmen.
44. Find all orders of the salesman who services 'Hardik'
45. List all orders that are greater than the average of April 10,1997.
46. Find all orders attributed to salesmen in 'London'.
47. List the commission of all salesmen serving customers in 'London'.
48. Find all customers whose cnum is 1000 above than the snum of Niraj.
49. Count the no. of customers with the rating above than the average of 'Surat'.
50. List all orders of the customer 'Chandresh'.
51. Produce the name and rating of all customers who have above average orders.
52. Find all customers with orders on 3rd Oct., 1997.

53. List the name and number of all salesmen who has more than Zero customer.
54. Select the name and number of all salesmen who have customers in their cities.
55. Find all salesmen who have customers with rating > 300
56. Find all customers having rating greater than any customer in 'Rome'.
57. List all orders that has amount greater than at least one of the orders from 6th October, 1997.
58. Find all orders with amounts smaller than any amount for a customer in 'Rome'.
59. Find all the customers who have greater rating than every customer in 'Rome'.
60. Select all customers whose rating doesn't match with any rating customer of 'Surat'.
61. List all customers whose ratings are equal to or greater than ANY 'Niraj'
62. Find out which salesman produce largest and smallest orders on each date.
63. Create a union of two queries that shows the names, cities and ratings of all customers. Those with rating of  $\geq 200$  should display 'HIGH RATING' and those with less than 200 should display 'LOW RATING'
64. Insert a row into salesmen table with the values snum is 100 salesman name is Rakesh, city is unknown and commission is 14%.
65. Insert a row in to customer table with values London, Pratik and 2005 for the columns city, name and number.
66. Create another table London staff having same structure as salesman table.
67. Insert all the rows of salesmen table with city London in the London staff table.
68. Create another table Day\_Totals with two attributes date and total and insert rows into this table from order table.
69. Create a duplicate of the salesmen table with a name Multicust. Now delete all the rows from the salesmen table.
70. Get back all the rows of salesmen table from its duplicate table.
71. Remove all orders from customer Chandresh from the orders table.
72. Set the ratings of all the customers of Piyush to 400.
73. Increase the rating of all customers in Rome by 100.
74. Salesman Miti has resigned. Reassign her number to a new salesman Gopal whose city is Bombay and commission is 10%.
75. Double the commission of all salesmen of London.
76. Set ratings for all customers in London to NULL.
77. Suppose we have a table called sales Manager with the same definition as Salesmen table. Company decides to promote salesmen having total order more than 5000 to Sales Manager. Fill up the Sales Manager table.
78. Assume that we have a table called smcity. Store the information of all salesmen with the customers in their home cities into smcity.
79. Create a table Bonus that contains date wise maximum amount of order for all salesmen.
80. Create a table Multicust containing the salesmen with more than one customer.
81. New Delhi office has closed. Remove all customers assigned to salesmen in New Delhi.
82. Delete all salesmen who have at least one customer with a rating of 100 from salesmen table.
83. Delete the salesmen who produce the lowest order for each day.
84. Find the smallest order for each day. Reduce the commission of all salesmen by 2% who produce this order.
85. Delete all customers with no current orders.
86. Write a command to find out the orders by date.
87. Write a command to add the item-name column to the order table.
88. Create a copy of your order table. Drop the original order table.
89. Write a command to create the salesmen table so that the default commission is 10% with no NULL permitted, snum is the primary key and all names contain alphabets only.
90. Give the commands to create our sample tables (salesmen, customer, orders) with all the necessary constraints like PRIMARY KEY, NOT NULL FOREIGN KEY.
91. Create a view called Big orders which stores all orders larger than Rs.4000.
92. Create a view Rate count that gives the count of no. of customers at each rating.
93. Create a view that shows all the customers who have the highest ratings.
94. Create a view that shows all the number of salesmen in each city.

95. Create a view that shows the average and total orders for each salesman after his name and number.
96. Create a view that shows all the salesmen with multiple customers.
97. Create a view to keep track of the total no of customers ordering, no of salesmen taking orders, the no of orders, the average amount ordered, and the total amount ordered for each day.
98. Create a view Show\_name that shows for each order the order no, amount, salesman name and the customer name.
99. List all orders of salesman 'Rajesh' using Show\_name View along with his commission.
100. Create a view Max\_sales to store the name and number of salesman, along with the date, who have the highest order on any given date.
101. Using above view, find out the name and number of salesman who have the highest order at least two times. Store the result in another view.
102. Create a view Same\_city that shows the no and name and city of the customers along with the city of the salesman serving them.
103. Create a view Commission of salesmen table to include only snum and commission field so that through this view someone can enter or change the commission but only to values between 10% and 20%.
104. Assume that the CURDATE is a constant representing current date. Give a command to create orders table with CURDATE as a default date.
105. List all salesmen in London who had at least one customer located there as well.
106. List all salesmen in London who didn't have any customer there.

## PI/Sql PRACTICAL LIST

### GROUP I (PL/SQL Examples)

- P1. Display any string using pl/sql block.
- P2. Check whether accepted number is positive or negative.
- P3. Accept three different numbers from terminal and display biggest one.
- P4. Make the sum of first 100 natural number and display it.
- P5. Make the sum of odd and even numbers up to 100 and display it.
- P6. Make the sum of numbers between n1 and n2 divisible by n3 and display it.  
Accept n1, n2 and n3 from terminal.
- P7. Display first 100 prime numbers on the terminal.

### GROUP II (PL/SQL)

1. Simple PL/SQL block construction
  - a. Displaying message on terminal
  - b. Calculation on given data and prepare result for display
  - c. Accept the value from user and do accordingly.
2. Decision making and looping
  - a. If..then, if..then..else, else..if ladder, and nested if.
  - b. Different looping concepts like loop..end loop, while, for
  - c. Nested looping.
  - d. Use of go to clause.

### GROUP III (PL/SQL)

1. Create one PL/SQL block for preparing the result based on following tables.  
(Using Cursor and Exception Handling)  
Stud (s\_no, name, address, city)  
Marks (s\_no, sub1, sub2, sub3, sub4)  
Result (s\_no, total, perc, class)  
Note : give first dist, first, second, pass, fail and fail A.T.K.T. (in one subject)
2. Create one PL/SQL block for preparing the net pay and pay slip for each month of the year based on following tables. (Using Cursor and Exception Handling)  
Emp ( e\_no, name, address, city)  
Salary (e\_no, basic, ta, da, hra, oth\_a, it, loan, pro\_txt, oth\_d)  
Net\_pay(e\_no, total\_allowance , total\_deduction, net\_pay, month\_of\_pay)