PRACTICAL-5

ABHIRAJ KUMAR

EN.NO. 191160107001

BATCH: 3PC2 LAB(A)

TABLE: SALESMEN

create table salesmen(snum varchar2(6) primary key check(snum like'S%'),

 sname varchar2(6)not null,city varchar2(15)

,comm number(5,2));

insert into salesmen values('S1001','Piyush','London',0.12);

insert into salesmen values('S1002','Niraj','San jose',0.13);

insert into salesmen values('S1003','Miti','London',0.11);

insert into salesmen values('S1004',Rajesh','Barcelona',0.15);

insert into salesmen values('S1005','Haresh','New york', 0.10);

insert into salesmen values('S1006','Ram','Bombay', 0.10);

insert into salesmen values('S1007','Nehal','Delhi', 0.09);

TABLE: CUSTOMER

create table customer (cnum varchar2(6) primary key check (cnum like'C%'),

 cname varchar2(20) not null,city varchar2(15),

rating number(5),snum varchar2(6));

insert into customer values ('C2001','Hardik','London', 100, 'S1001');

insert into customer values ('C2002', 'Geeta', 'Rome', 200, 'S1003');

insert into customer values ('C2003', 'Kavish', 'San jose', 200, 'S1002');

insert into customer values ('C2004', 'Dhruv', 'Berlin', 300, 'S1002');

insert into customer values ('C2005', 'Prathan', 'London', 100, 'S1001');

insert into customer values ('C2006', 'Vyomesh', 'San jose', 300, 'S1007');

insert into customer values ('C2007', 'Kirit', 'Rome', 100, 'S1004');

TABLE: ORDER

create table ORDER1 (onum varchar2(6) primary key check (onum like'O%'),

amt number(10,2) not null, odate date, cnum varchar2(6) ,snum varchar2(6));

insert into ORDER1 values ('O3001', 18.69, 'Mar-10-90', 'C2008', 'S1007');

insert into ORDER1 values ('O3003', 767.19, 'Mar-10-90', 'C2001', 'S1001');

insert into ORDER1 values ('O3002', 1900.10, 'Oct-03-90', 'C2007', 'S1004')

insert into ORDER1 values ('O3005', 5160.45, 'Oct-04-90', 'C2003', 'S1002');

insert into ORDER1 values ('O3006',1098.16, 'Mar-10-90', 'C2008', 'S1007');

insert into ORDER1 values ('O3009', 1713.23, 'Apr-10-90', 'C2002', 'S1003');

insert into ORDER1 values ('O3007', 75.75, 'Apr-10-90', 'C2004', 'S1002');

insert into ORDER1 values ('O3008', 4723.00, 'May-10-90', 'C2006', 'S1001');

insert into ORDER1 values ('O3010', 1309.95, 'May-10-90', 'C2004', 'S1002');

insert into ORDER1 values ('O3011', 9891.88, 'Jun-10-90', 'C2006', 'S1001');

Perform following queries.

SELECT

1. Display all the information of salesmen.

:- select * from selesmen;

2. Display snum,sname,city from salesmen table.

:- select snum, sname, city from salesmen;

3.Display odate,snum,onum and amt from orders.

:- select odate, snum, onum,amt from ORDER1;

4. Display the information of orders without duplication.

:- select distinct * from ORDER1;

5. List of sname, city from salesmen where city is 'LONDON'.

:- select sname, city from salesmen where city='London';

6. List all records of customers where rating is equal to 100.

:- select * from customer where rating=100;

7. Write a select command that produces the order number,amount and date for all

rows in the order table.

:- select onum, amt, odate from order1;

8. Produces all rows from the customer table for which the salesperson's number is S1001.

:- select * from customer where snum='S1001';

9. Display the salesperson table with the column in the following order:

city,sname,snum,comm.

:- select city, sname, snum, comm from salesmen;

10. Write a select command that produces the rating followed by the name of each

customer in SAN JOSE.

:- select rating, cname from customer where city='San jose';

11. Display SNUM values of all salesmen without any repeat.

:- select distinct snum from salesmen;

OPERATORS

12. List all customers with a rating above 200.

:- select * from customer where rating > 200;

13. List all customers in SAN JOSE who have a rating above 200.

:- select *from customer where city='San jose' and rating > 200;

14. List all customers who were either located in SAN JOSE or had a rating above 200.

:- select * from customer where city='San jose' or rating > 200;

15. List of all customers who were either located in SAN JOSE or not rating above 200.

:- select * from customer where city='San jose' or not rating > 200;

16. List of all customers who were not located in SAN JOSE or rating is not above 200.

:- select * from customer where not city='San jose' or not rating > 200;

or,

select *from customer where not(city='San jose' or rating > 200);

17. Write a query that will give you all orders for more than $1000.

:- select * from order1 where amt>1000;

18. Write a query that will give you the names and cities of all salesmen in

LONDON with a commission above 0.10.

:- select sname, city from salesmen where city='London' and comm>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.

:- select * from customer where not(rating <=100 and city='Rome');

SPECIAL OPERATORS

20. Display all salesmen that were located in either BARCELONA or

LONDON (use IN keyword).

:- select * from salesmen where city IN('Barcelona' ,'London');

21. Find all customers matched with salesmen S1001, S1007 and S1004.

:- select * from customer where snum =ANY('S1001','S1007','S1004');

22. Display all salesmen with commission between 0.10 and 0.12.

:- select * from salesmen where comm BETWEEN 0.10 and 0.12;

23. Select all customers whose names fall in a 'A' and 'G' alphabetical.

:- select * from customer where cname between 'A%' and 'G~';

or,

 select * from customer where cname (A-G)%;

LIKE OPERATORS.

24. List all the customers whose names begin with 'G'.

:- select * from customer where cname like 'G%';

25. List all salesmen whose sname start with letter 'P' and end letter is 'H'.

:- select * from salesmen where sname like 'P%H';

NULL OPERATORS.

26. Find all records in customer table with NULL values in the city column.

:- select * from customer where city ='NULL';

27. Write a two queries that will produce all orders taken on October 3rd or 4th ,1990
(use IN operator and Use BETWEEN operator)

:- select *from order1 where to_char (odate,'dd-mon-yy') in('03-oct-90','04-oct-90');

or,

 select *from order1 where to_char (odate,'dd-mon-yy') between '03-oct-90'and'04-oct-90';

28. Write a query that selects all of the customers matched with S1001 and S1002.

:- select * from customer where snum=ANY('S1001','S1002');

or,

 select *from customer where snum='S1001' or snum='S1002';

29. Write a query that will produce all of the customers whose names begin with a letter from A to H.

:- select * from customer where cname between 'A%' and 'H~';

or,

 select * from customer where cname like '[A-H]%';

30. Write a query that selects all customers whose names begin with 'C'.

:- select * from customer where cname like 'C%';

31. Write a query that selects all orders without ZEROS or NULLS in amt field.

:- select onum from order1 where not amt =0 or amt= not NULL;

or,

 select * from order1 where amt is not NULL or not amt=0;

FUNCTIONS

32. Display sum of amt, average of orders.

:- select sum(amt) "sum" ,avg (amt) "avg" from order1;

33. To count the numbers of salesmen without duplication in the orders tables.

:- select DISTINCT count (snum) "total no." from order1;

34. Count the rating of customers (with NULL and without NULL).

:- select count(*) "TOTAL RATING" from customer;

or,

 select count(distinct rating) from customer;

35. Find the largest order taken by each salesperson. (hint: use group by)

:- select snum , max(amt) from order1 group by snum;

or,

select snum,max(round (amt)) "MAXIMUM AMOUNT" from order group by

 snum;

36. Find the largest order taken by each salesperson on each date.

:- select odate,snum, max(amt) from order1 group by odate, snum;

37. Find out which day had the higher total amount ordered.

:- select odate, max(amt) from order1 group by odate;

or,

select ODATE, AMT from ORDER1 where AMT = (select MAX(AMT) from ORDER1);

38. Write a query that counts all orders for October 3rd.

:- select count(onum) from order1 where to_char(odate,'mon-dd') ='Oct-3';

39. Write a query that counts the number of different non-NULL city in the

customer table.

:- select count(distinct city) "TOTAL CITY" from customer;

40. Write a query that selects the first customer in alphabetical order whose name

begin with 'G'.

:- select cname from customer where cname like 'G%' order by cname;

41. write a query that selects each customers smallest order.

:- select cnum, min(amt) from order1 group by cnum;

or,

select cnum,min(round (amt)) "MINIMUM AMOUNT" from order1 group by cnum;

42. Write a query that selects the highest rating in each city.

:- select city, max(rating) from customer group by 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)

:- select count(distinct snum), ODATE from order1 group by ODATE;

44. Display all the information in descending orders (use column CNUM).

:- select * from customer order by cnum DESC;

45. Display all the information in descending orders (use column CNUM, AMT).

:- select * from order1 order by cnum DESC , amt DESC;

46. Display sname and comm. From salesmen in descending order (in place of column name use column number).

:-select sname,comm from salesmen order by rownum desc;

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.

:- select onum, snum, amt*0.12 from order1 ;

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).

:- select city "city", max(rating) " rating " from customer group by city;

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.

:- select rating, cname, cnum from customer order by rating DESC;

50. Write a query that totals the orders for each day and places the results in descending order.

:- select sum(amt),odate from order group by odate order by sum (amt) desc;

JOIN

51. Show the names of all customers matched with the salesmen serving them.

:- select cname from customer c , salesmen s where s.snum= c.snum;

52. Write a query that lists each order number followed by the name of the customer who made the order.

:- select cname, onum from customer c, order1 o where c.snum=o.snum;

53. Write a query that gives the names of both the salesperson and the customer for each order after the order number.

:- select o.onum, c.cname , s.sname from customer c, salesmen s ,order1 o

 where c.snum=s.snum and c.cnum=o.cnum;

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.

:- select c.cname, s.sname, s.comm from salesmen s, customer c where

c.snum=s.snum and s.comm>0.12;

55. Write a query that calculates the amount of the salesperson's commission on each order by a customer with a rating above 100.

:- select amt*comm, rating from salesmen s, customer c ,order1 o where c.snum=s.snum

and o.cnum=c.cnum and rating>100 ;

OTHERS

56. List all customer located in cities where salesperson 'PIYUSH' has customer.

:-Select c.cname,c.city from customer c,salesman s where c.snum=s.snum and

 s.sname =Piyush;

57. List all salesmen who are living in same city without duplicate rows.

:- select distinct sname,city from salesmen;

58. Extract all orders of 'PIYUSH'.

:- select * from order1 where snum=(select snum from selesmen where sname='Piyush');

or,

 select order1.onum,order1.amt,order1.odate from order1,salesmen

 where order1.snum=salesmen.snum and salesmen.sname='Piyush';

59. Extract all orders of LONDON'S salesmen.

:- Select order1.onum,order1.amt,order1.odate from order1 o, selesmen s where

o.snum=s.snum and city='London';

60. Find all customers whose cnum is 1000 above than the snum of 'PIYUSH'.

:- select cnum,cname from customer where cnum > (select snum +

 1000 from salesmen where sname='Piyush');

61. Count the no. of customers with the rating above than average Rating of 'LONDON'.

:- select count(cnum) from customer where rating > (select avg(rating) from customer

where city='London');

62. Produce the name and rating of all customers who have above average Rating.

:- select cname, rating from customer where rating > (select avg(rating) from customer);

63. List all salesmen with customers located in their cities.

:- select distinct salesman.sname, salesman.city, salesman.comm from

salesman, customer where salesman.city = customer.city and

salesman.snum=customer.snum;

64. Select all customers whose rating doesn't match with any rating customer of 'SAN JOSE'.

:- select * from customer where rating not in(select rating from customer where city='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'.

:- select cname, city, rating, 'HIGH RATING' from customer where rating>=200 UNION (select cname, city, rating, 'LOW RATING' from customer where rating<200);

66. Find all customers with orders on 3rd october 1990 using correlate sub query.

:- select CNAME from CUSTOMER where CNUM = (select CNUM from ORDER1 where ODATE = 'Oct-03-90');

67. Find all customers having rating greater than any customer in 'ROME'.

:- select * from customer where rating > ANY (select rating from customer where city = '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%.

:- insert into salesmen values('S1008', 'Rakesh', null, 0.14);

69. Create another table London_staff having same structure as salesmen table.

:- create table London_staff as select * from salesman where sanme= 'abc';

70. Delete all orders from customer 'PIYUSH' from the order table.

:- delete from order1 where snum = (select snum from salesmen where sname = 'Piyush');

71. Set the ratings of all the customers of PIYUSH to 400.

:- UPDATE customer SET rating = 400 where snum = (select snum from salesmen where sname = 'Piyush');

72. Increase the rating of all the customers in ROME by 100.

:- UPDATE customer SET rating=rating+100 where city = 'Rome';

73. Double the commission of all salesmen of LONDON.

:- UPDATE salesmen SET comm=comm * 2 where city = 'London';

74. Set ratings for all customers in LONDON to NULL.

:- UPDATE customer SET rating = NULL where city = 'London';

75. Delete all salesmen who have at least one customer with a rating of 100 from salesmen table.

:- delete from salesman where snum in(select snum from customer where rating=100);