```
create table salespeople
(snum int primary key,
 sname char(10),
 city char(20),
 comm int not null);

 insert into salespeople
 values (1001, 'Peel', 'London', 12)
 insert into salespeople
 values (1002, 'Serres', 'San Jose', 13);
 insert into salespeople (snum, sname, city, comm)
 values (1004, 'Motika', 'London', 11);
 insert into salespeople
 values (1007, 'Rifkin', 'Barcelona', 15);
 insert into salespeople
 values (1003, 'AxelRod', 'New Yrok', 10);
 insert into salespeople
 values (1008, 'Fran', 'London', 25);

 select * from salespeople;



create table orders
(onum int,
 amt numeric (7,2),
 odate date,
 cnum int,
 snum int);

 insert into orders
 values (3001, 18.69, '10/03/1990', 2008, 1007);
 insert into orders
 values (3003, 767.17, '10/03/1990', 2001, 1001);
 insert into orders
 values (3002, 1900.10, '10/03/1990', 2007, 1004);
 insert into orders
 values (3005, 5160.45, '10/03/1990', 2003, 1002);
 insert into orders
 values (3006, 1098.16, '10/03/1990', 2008, 1007);
 insert into orders
 values (3009, 1713.23, '10/04/1990', 2002, 1003);
 insert into orders
 values (3007, 75.75, '10/04/1990', 2004, 1002);
 insert into orders
 values (3008, 4723, '10/05/1990', 2006, 1001);
 insert into orders
 values (3010, 1309.95, '10/06/1990', 2004, 1002);
 insert into orders
 values (3011, 9891.88, '10/06/1990', 2006, 1001);

 select * from orders;



create table customers
(cnum int,
 cname char(20),
 city char (20),
 rating int,
 snum int);
```

```
insert into customers
values (2001, 'Hoffman', 'London', 100, 1001);
insert into customers
values (2002, 'Giovanni', 'Rome', 200, 1003);
insert into customers
values (2003, 'Lilu', 'San Jose', 200, 1002);
insert into customers
values (2004, 'Grass', 'Berlin', 300, 1002);
insert into customers
values (2006, 'Clemens', 'London', 100, 1001);
insert into customers
values (2008, 'Cisneros', 'San Jose', 300, 1007);
insert into customers
values (2007, 'Pereira', 'Rome', 100, 1004);

select * from customers;
```

Q1. List all the column of the salespeople table.

```
select snum, sname, city, comm
from salespeople;
```

Q2. List all customers with a rating of 100.

```
select * from customers
where rating = 100;
```

Q3. Find the largest order taken by each salesperson on each date.

```
select s.snum, odate, MAX(amt) as 'Largest Order'
from salespeople s, orders o
where s.snum = o.snum
group by s.snum, odate
having MAX(amt) in
   (select amt
    from orders)
```

Q4. Arrange the Order table by descending customer number.

```
select cnum, onum, amt, odate, snum
from orders
order by cnum desc
```

Q5. Find which salespeople currently have orders in the order table.

```
select distinct s.snum , sname 'Name', city 'City'
from salespeople as s
inner join orders as o
on s.snum = o.snum
order by s.snum
```

```
select s.snum, count(onum) as 'No. of orders', sname 'Name', city 'City'
from salespeople as s
inner join orders as o
on s.snum = o.snum
group by s.snum, sname, city
order by s.snum
```

Q6. List names of all customers matched with the salespeople serving them.

```
select c.snum, cname, sname
from customers c, salespeople s
where c.snum = s.snum
order by snum
```

Q7. Count the orders of each of the salespeople and output the results in descending order.

```
select s.snum, sname, COUNT(onum) as 'No. of Orders'
from salespeople s, orders o
where s.snum = o.snum
group by s.snum, sname
order by [No. of Orders] desc
```

Q8. Match salespeople to customers according to what city they live in.

```
select sname,cname,s.city
from salespeople s,Customers c
where s.city=c.city and s.snum=c.snum
```

Q9. Find all the customers in San Jose who have a rating above 200.

```
select * from customers
where city = 'San Jose' and rating > 200
```

Q10. List the names and commissions of all salespeople in London

```
select snum as 'ID', sname as 'Name', comm as 'Commission', city as 'City'
from salespeople
where city = 'London'
```

Q11. List all the orders of Salesperson Motika from the orders table

```
select sname 'Name', onum 'Order no.', amt 'Amount', odate 'Date'
from orders o, salespeople s
where s.snum = o.snum and sname = 'Motika'
```

Q12. Find all customers who booked orders on October 3.

```
select cname as 'Customers'
from orders o, customers c
where odate = '1990-10-03' and c.cnum = o.cnum
```

Q13. Give the sums of the amounts from the Orders table, grouped by date, eliminating all those dates where the SUM was not at least 2000 above the maximum amount.

```
select odate, sum(amt) as avg_amt, max(amt) as max_amt
from orders
group by odate
having sum(amt) > 2000
```

Q14. Select all orders that had amounts that were greater than at least one of the orders from October 6.

```
select onum, amt
from orders
where amt > any
      (select amt from orders where odate = '10/06/1990')
```

Q15. List all the largest orders for October 3, for each salesperson.

```
select s.snum as 'ID', sname 'Name', MAX(amt) as 'Largest order'
from orders o, salespeople s
where s.snum = o.snum
and odate = '10/03/1990'
group by sname, s.snum
order by ID
```

Q16. Find all customers located in cities where Serres has customers.

```
select s.snum, cnum, s.sname, cname, c.city
from customers c, salespeople s
where s.snum = c.snum and sname = 'Serres'
```

Q17. Select all customers with a rating above 200.

```
select * from customers
where rating > 200
```

Q18. Find salespeople with customers located in their own cities.

```
select s.snum, sname, cname, s.city, c.city
from customers c, salespeople s
where s.city = c.city and s.snum = c.snum
order by snum
```

Q19. Find salespeople whose name starts with P and fourth character is I

```
select * from salespeople
where sname like 'P__l'
```

Q20. Write a query that uses a sub query to obtain all orders for the customer named Cisneros. Assume you do not know his customer number.

```
select onum, cname, amt, odate
from orders o, customers c
where o.cnum = c.cnum and cname =
   (select cname
    from customers
    where cname = 'Cisneros')
```

Q21. Find the largest orders for Serres and Rifkin.

```
select s.snum, s.sname, max(o.amt)
from salespeople s, orders o
where s.snum = o.snum and sname in ('Serres', 'Rifkin')
group by s.snum, s.sname
```

Q22. Sort the salespeople table in the following order : snum, sname, commission, city.

```
select snum, sname, comm, city
from salespeople
order by snum, sname, comm, city
```

Q23. Select all customers whose names fall in between A and G alphabetical range

```
select * from customers
where substring(cname, 1, 1) between 'A' and 'G'
order by cname
```

Q24. Write a query that totals the orders for each day and places the results in descending order.

```
select odate, COUNT(onum) as Order_Count
from orders
group by odate
order by Order_Count desc
```

Q25. Write a select command that produces the rating followed by the name of each customer in San Jose.

```
select rating, cname, city
from customers
where city = 'San Jose'
```

Q26. Find all orders with above average amounts for their customers.

```
select AVG(amt) as avg_amt from orders;

select amt, cname
from Orders o, Customers c
where c.cnum=o.cnum and amt >
   (select AVG(amt)
    from orders)
group by cname, amt


select amt,cname
from Orders o, Customers c
where c.cnum=o.cnum
group by cname,amt
having  amt >
   (select AVG(amt)
    from Orders o)
```

Q27. Write a query that selects the highest rating in each city.

```
select city, MAX(rating) as Ratings
from customers
group by city
order by Ratings
```

Q28. Find all salespeople that are located in either Barcelona or London.

```
select * from salespeople
where city in ('Barcelona', 'London')
```

Q29. Write a query that joins the customer table to itself to find all pairs or customers served by a single salesperson.

```
select a.snum, a.cnum, a.cname
from customers a, customers b
where a.snum = b.snum and a.cnum=b.cnum
order by a.snum
```

Q30. Write a query that will give you all orders for more than $1000.00

```
select * from orders
where amt > 1000
```

Q31. Write a query that lists each order number followed by the name of customer who made that order.

```
select onum, cname
from orders, customers
where orders.cnum = customers.cnum
order by onum
```

Q32. Write two queries that will produce all orders taken on October 3 or October 4.

```
select * from orders
where odate = '10-03-1990'
order by onum

select * from orders
where odate = '10-04-1990'
order by onum
```

Q33. Find all rows from the customer's table for which the sales person number is 1001.

```
select * from customers
where snum = 1001
```

Q34. Find all salespeople name and commission.

```
select sname, comm
from salespeople
order by sname
```

Q35. Find all sales people for whom there are customers that follow them in alphabetical order.

```
select sname, cname
from salespeople, customers
where salespeople.snum = customers.snum
order by sname, cname
```

Q36. Write a query that produces the names and ratings of all customers who have average orders.

```
select cname, rating, COUNT(amt) as amnt, cast(AVG(amt) as decimal (10,2)) as avgamt
from customers c, orders o
where c.cnum = o.cnum
group by cname, rating
having count(amt) > 1
```

Q37. Find the sum of all Amounts from the orders table.

```
select SUM(amt) as total from orders
```

Q38. Write a query that gives the names of both the salesperson and the customer for each order after the order number.

```
select onum, sname, cname, o.snum
from orders o, salespeople s, customers c
where c.cnum = o.cnum and s.snum = o.snum and s.snum = c.snum and c.snum = o.snum
order by onum
```

Q39. List the commission of all salespeople services customers in London.

```
select comm, sname, cname
from salespeople s, customers c
where c.city='London' and s.snum = c.snum
```

Q40. Find all orders attributed to sales people who live in London.

```
select sname, city, onum, s.snum
from salespeople s, orders o
where s.snum = o.snum and city = 'London'
```

Q41. Find all salespeople who have customers with more than one current order.

```
select sname, COUNT(onum) as qnty
from salespeople s,Customers c,Orders o
where c.snum=s.snum and o.snum=c.snum
group by sname
having count(onum)>1
```

Q42. Find the average commission for salespeople in London.

```
select city, (cast(AVG(comm) as decimal(10,2))) as commission
from salespeople
where city = 'London'
group by city
```

Q43. Find all orders credited to the same salesperson who services Hoffman (cnum 2001).

```
select s.snum, sname, onum, o.cnum
from customers c, salespeople s, orders o
where  cname = 'Hoffman' and c.snum = s.snum and o.snum = s.snum
```

Q44. Find all salespeople whose commission is in between 0.10 and 0.12 (both inclusive).

```
select * from salespeople
where comm >=10 and comm <=12
```

Q45. Write a query that will give you the names and cities of all salespeople in London with a commission above 0.10.

```
select * from salespeople
where comm > 10
```

Q46. Write a query that selects each customer’s smallest order.

```
select c.cnum, cname, MIN(amt) as small
from orders o, customers c
where o.cnum = c.cnum
group by c.cnum, cname
```

Q47. Write a query that selects the first customer in alphabetical order whose name begins with G.

```
select top 1 cnum, cname, city
from customers
where cname like 'G%'
```

Q48. Write a query that counts the number of different non NULL city values in the customers stable.

```
select COUNT(distinct city) as city_count
from Customers
where city is not null
```

Q49. Find the average amount from the Orders Table.

```
select (cast(AVG(amt) as decimal(10,2))) as avg_amount
from orders
```

Q50. Find all customers who are not located in San Jose and whose rating is above 200.

```
select cname, city, rating
from customers
where city != 'San Jose' and rating > 200
```

Q51. Give a simpler way to write this query. SELECT snum, sname, city, comm. FROM salespeople WHERE (comm. >= 0.12 OR comm. < 0.14)

```
select snum, sname, city, comm
from salespeople
```

Q52. Which salesperson has earned the maximum commission?

```
select snum, sname, comm
from salespeople
where comm =
   (select MAX(comm)
    from salespeople)
```

Q53. List all customers in descending order of customer rating.

```
select cnum, cname, rating
from customers
order by rating desc, cname
```

Q54. On which days has Hoffman placed orders?

```
select o.cnum, cname, odate
from orders o, customers c
where cname = 'Hoffman' and c.cnum = o. cnum
```

Q55. Which salesmen have no orders between 10/03/1990 and 10/05/1990?

```
select s.snum, sname, odate
from orders o, salespeople s
where s.snum = o.snum and (odate not between '10-03-1990' and '10-05-1990')
```

Q56. Who is the most successful sales person?

```
select sname, amt
from orders o, salespeople s
where o.snum = s.snum
group by sname, amt
having amt =
   (select MAX(amt) from orders)
```

```
select sname, amt
from orders o, salespeople s
where o.snum = s.snum and amt =
   (select max(amt) from orders)
```