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Class :- MCA (sem-1)

Division :- B

Roll No. :- 124

Paper No. :- 101

Subject :- RDBMS

Assignment No. :- 01

SQL - QUERIES :-

1. SIMPLE QUERIES (INVOLVING ONLY ONE TABLE) :-

1. List details of all the employees.

```
select *
from emp;
```

2. List number and name of all the employees.

```
select empno,ename
from emp;
```

3. List number, name, job & salary of all the employees.

```
select empno,ename,job,sal
from emp;
```

4. List details of employees whose salary is more than 2000.

```
select *
from emp
where sal > 2000;
```

5. List details of orders where order amount is more than 1000.

```
select *
from ord
where total > 2000;
```

6. List details of customers from the state CA

```
select *
from customer
where state = 'CA';
```

7. List details of departments that are located in NEW YORK

```
select *
from dept
where loc = 'NEW YORK';
```

8. List details of departments that are located in either NEW YORK or BOSTON.

```
select *
from dept
where loc IN('NEW YORK','BOSTON');
```

9. List details of departments that are located in neither NEW YORK nor BOSTON.

```
select *
from dept
where loc NOT IN('NEW YORK','BOSTON');
```

10. List details of employees of DEPTNO 20.

```
select *
from emp
where deptno = 20;
```

11. List details of employees of DEPTNOs 10 & 20.

```
select *
from emp
where deptno IN(10,20);
```

12. List details of employees of DEPTNOs 10, 20 & 30.

```
select *
from emp
where deptno IN(10,20,30);
```

13. List details of employees having commission greater than 60% of their salary.

```
select *
from emp
where comm > (sal*0.6);
```

14. List details of all CLERKs.

```
select *
from emp
where job = 'CLERK';
```

15. List details of all CLERKs of DEPTNO 20.

```
select *
from emp
where job = 'CLERK' and deptno = 20;
```

16. List details of all CLERKs of DEPTNOs 10 & 20.

```
select *
from emp
where job = 'CLERK' and deptno in(10,20);
```

17. List details of all CLERKs, ANALYSTs, SALESMAN and MANAGERs.

```
select *
from emp
where job IN ('CLERK','ANALYST','SALESMAN','MANAGER');
```

18. List details of employees whose name starts with the alphabet 'A'.

```
select *
from emp
where ename LIKE 'A%';
```

19. List details of employees whose name does not start with the alphabet 'A'.

```
select *
from emp
where ename NOT LIKE 'A%';
```

20. List details of employees whose name contains the alphabet 'A' at the second position.

```
select *
from emp
where ename LIKE '_A%';
```

21. List details of employees whose name contains the alphabet 'A' at any position.

```
select *
from emp
where ename LIKE '%A%';
```

22. List details of employees that contain the string 'AM' in their names.

```
select *
from emp
where ename LIKE '%AM%';
```

23. List details of employees who are not assigned any commission.

```
select *
from emp
where comm IS null;
```

24. List details of orders which are not having any commission plan.

```
select *
from ord
where commplan IS null;
```

25. List details of orders which are having some commission plan.

```
select *
from ord
where commplan IS NOT null;
```

26. List details of employees who are drawing salary >= 2000 and <= 4000.

```
select *
from emp
where sal >= 2000 and sal <= 4000;

select *
from emp
where sal BETWEEN 2000 AND 4000;
```

27. List EMPNO, ENAME, JOB and total earnings of all employees. (Note: an employee earns in the form of SALary and COMMission)

```
select empno, ename, job, NVL(sal,0)+NVL(comm,0) AS TOTAL_EARNING
from emp;
```

28. List details of customers whose name contains 2 or more words.

```
select *
from customer
where name like '% %';
```

29. List details of employees in ascending order of their names.

```
select *
from emp
order by ename;
```

30. List department-wise, salary-wise details of all employees. (Both, DEPTNO and SAL, in Ascending order)

```
select *
from emp
order by deptno, sal;
```

31. List department-wise, salary-wise details of all employees. (where DEPTNO-Ascending order & SAL-Descending order)

```
select *
from emp
order by deptno, sal DESC;
```

32. List department-wise, salary-wise details of all employees. (Both, DEPTNO and SAL, in Descending order)

```
select *
from emp
order by deptno DESC, sal DESC;
```

33. List details of orders in ascending order of their order amount.

```
select *
from ord
order by total;
```

34. List details of orders which are not having any commission plan in descending order of their order amount.

```
select *
from ord
where commplan is null
order by total DESC;
```

35. List details of employees of DEPTNO 10 in ascending order of their salary.

```
select *
from emp
where deptno = 10
order by sal;
```

36. List all JOBs from the EMP table.

```
select DISTINCT job
from emp;
```

37. List all PRODIDs that were ordered at least once.

```
select DISTINCT prodid
from item;
```

38. List details of all customers in descending order of their creditlimits.

```
select *
from customer
order by creditlimit DESC;
```

39. List details of all orders in the order in which they were ordered.

```
select *
from ord
order by orderdate,ordid;
```

40. List details of all employees in descending order of their earnings. (Note: an employee earns in the form of SALary and COMMission)

```
select *
from emp
order by (NVL(sal,0)+NVL(comm,0)) DESC;
```

41. List details of all CLERKs in descending order of their earnings. (Note: an employee earns in the form of SALary and COMMission)

```
select *
from emp
where job = 'CLERK'
order by (NVL(sal,0)+NVL(comm,0)) DESC;
```

42. List details of all employees in descending order of their experience.

```
select *
from emp
order by hiredate;
```

43. List EMPNO, ENAME, JOB and their experience in years (rounded to 0 digits in decimal place).

```
select empno,ename,job,floor(months_between(current_date, hiredate)/12) as experience
from emp;
```

2. QUERIES USING GROUP FUNCTIONS :-

44. Find total number of employees.

```
select count(*)
from emp;
```

45. Find sum & average of salary of all the employees.

```
select sum(sal), avg(sal)
from emp;
```

46. Find the highest & the lowest salary drawn by an employee.

```
select max(sal), min(sal)
from emp;
```

47. Find average of earnings of all the employees.

```
select avg(NVL(sal,0)+NVL(comm,0))
from emp;
```

48. Find total number of employees earning more than 2000.

```
select count(*)
from emp
where (NVL(sal,0)+NVL(comm,0)) > 2000;
```

49. Find total salary of all employees of DEPTNO 10.

```
select sum(sal)
from emp
where deptno = 10;
```

50. Find total number of employees who do not get any commission.

```
select count(*)
from emp
where comm is null;
```

51. Find total number of orders that are not having any commission plan.

```
select count(*)
from ord
where commplan is null;
```

52. Find total number of CLERKs in the company.

```
select count(*) as NO_OF_CLERKS
from emp
where job = 'CLERK';
```

53. Find total salary of all the MANAGERs.

```
select sum(sal) as Total_salary_of_all_managers
from emp
where job = 'MANAGER';
```

54. Find total number of jobs in the company.

```
select count(distinct job) as No_of_jobs
from emp;
```

55. Find sum of salary of employees of each department.

```
select deptno, sum(sal)
from emp
group by deptno;
```

56. Find total number of employees in each department.

```
select deptno, count(*)
from emp
group by deptno;
```

57. Find total number of CLERKs in each department.

```
select deptno, count(*)
from emp
where job = 'CLERK'
group by deptno;
```

58. Find total number of jobs in each department.

```
select deptno, count(distinct job)
from emp
group by deptno;
```

59. Find total number of employees in each job of each department.

```
select deptno, count(*)
from emp
group by deptno;
```

60. Find CUSTID and total number of orders placed.

```
select deptno, job, count(*) as No_of_employees
from emp
group by (deptno,job)
order by deptno,job;
```

61. Find total order amount of each product.

```
select prodid, sum(itemtot)
from item
group by prodid;
```

62. Find total quantity of each product ordered.

```
select prodid, sum(qty)
from item
group by prodid;
```

63. Find total number of items ordered in each order.

```
select ordid, count(*)
from item
group by ordid;
```

64. Find total number of orders that were placed in each month of the year 1987.

```
select EXTRACT(month FROM orderdate) as month, count(*)
from ord
where EXTRACT(year FROM orderdate) = 1987
GROUP BY EXTRACT(month FROM orderdate);
```

65. Find total number of employees joined in each year.

```
SELECT EXTRACT(year FROM hiredate) AS year, count(*)
FROM emp
GROUP BY EXTRACT(year FROM hiredate);
```

66. Find total number of CLERKs joined in each year.

```
SELECT  EXTRACT(year FROM hiredate) AS year,  count(*)
FROM emp
Where job = 'CLERK'
GROUP BY EXTRACT(year FROM hiredate);
```

67. Find total number of orders ordered in each year.

```
select EXTRACT(Year FROM orderdate) as Year, count(*)
from ord
GROUP BY EXTRACT(year FROM orderdate);
```

68. Find total number of customers residing in each area.

```
select area, count(*)
from customer
group by area;
```

69. Find total order amount for each year.

```
select EXTRACT(Year FROM orderdate) as Year, sum(total)
from ord
GROUP BY EXTRACT(year FROM orderdate);
```

70. Find total number of orders in each COMMPLAN.

```
select commplan, count(*)
from ord
group by commplan;
```

71. Find average price of each product ordered.

```
select prodid, avg(actualprice)
from item
group by prodid;
```

72. Find DEPTNO in which there are more than 3 employees.

```
select deptno
from emp
group by deptno
having count(*)>3;
```

73. Find dates on which 2 or more than 2 orders were placed.

```
select orderdate
from ord
group by orderdate
having count(*)>=2;
```

74. Find CUSTID who placed more than 3 orders.

```
select custid
from ord
group by custid
having count(*)>3;
```

75. Find PRODID, which has been ordered for more than 6 times.

```
select prodid
from item
group by prodid
having count(*)>6;
```

76. Find ORDID in which more than 3 items were ordered.

```
select ordid
from item
group by ordid
having count(*)>3;
```

77. Find DEPTNO in which there are 2 or more than 2 CLERKs.

```
select deptno
from emp
where job = 'CLERK'
group by deptno
having count(*) >=2 ;
```

78. Find EMPNO and total number of subordinates to it (Note: Find only those EMPNO that has at least one subordinate i.e. those who are manager of some employee).

```
select mgr, count(*)
from emp
group by mgr;
```

79. Find DEPTNO whose employees' total salary is more than 10,000.

```
select deptno
from emp
group by deptno
having sum(sal)>10000;
```

80. Find DEPTNO in which there are 3 or more than 3 distinct jobs.

```
select deptno,count(distinct(job))
from emp
group by deptno
having count(*)>=3;
```

81. Find EMPNO of all the employees who have more than 2 subordinates.

```
select mgr
from emp
group by mgr
having count(*)>2;
```

82. Find DEPTNO-wise sum of salaries in the descending order of the total salaries.

```
select deptno , sum(sal)
from emp
group by deptno
order by sum(sal) DESC;
```

83. Find DEPTNO-wise sum of salaries of all CLERKs in descending order of total salary.

```
select deptno , sum(sal)
from emp
where job = 'CLERK'
group by deptno
order by sum(sal) DESC;
```

84. Find date-wise total number of orders placed in the ascending order of the total number of orders.

```
select orderdate , count(*)
from ord
group by orderdate
order by count(*), orderdate;
```

3. QUERIES USING SUBQUERY :-

85. List details of all the employees of SALES department.

```
select *
from emp
where deptno =
(
   select deptno
   from dept
   where dname = 'SALES'
);
```

86. List details of employees of departments that are located in NEW YORK.

```
select *
from emp
where deptno =
(
   select deptno
   from dept
   where loc = 'NEWYORK'
);
```

87. List details of the employees of KING's department.

```
select *
from emp
where ename <> 'KING'
and deptno =
(
   select deptno
   from emp
   where ename = 'KING'
);
```

88. List details of the departments that have at least one employee.

```
select *
from dept
where deptno in
(
   select deptno
   from emp
);
```

89. List details of the employees that have at least one customer assigned to them.

```
select *
from emp
where empno in
(
   select repid
   from customer
);
```

90. List details of the employees that have at least one subordinate.

```
select *
from emp
where empno in
(
   select mgr
   from emp
);
```

91. List details of the customers that have placed at least one order.

```
select *
from customer
where custid in
(
   select custid
   from ord
);
```

92. List details of the products that have been ordered once.

```
select *
from product
where prodid in
(
   select prodid
   from item
   group by prodid
   having count(*) = 1
);
```

93. List details of the employees that have at least one customer assigned to them and that at least one of these customers have placed at least one order. OR List those employees through whom at least one order is placed.

```
select *
from emp
where empno in
(
   select repid
   from customer
   where custid in
   (
      select custid
      from ord
   )
);
```

94. List details of the employees that are drawing same salary as the employee 'MARTIN' is drawing.

```
select *
from emp
where ename <> 'MARTIN'
and sal =
(
   select sal
   from emp
   where ename = 'MARTIN'
);
```

95. List details of the employees that have same salary and job as the employee 'MARTIN' has.

```
select *
from emp
where ename <> 'MARTIN'
and (sal,job) =
(
   select sal,job
   from emp
   where ename = 'MARTIN'
);
```

96. List details of the employees of DEPTNO 20 that have salary greater than that of an employee of DEPTNO 10.

```
select *
from emp
where deptno = 20
and sal >
(
   select min(sal)
   from emp
   where deptno = 10
);
```

97. List details of the employees of DEPTNO 10 that have salary greater than that of all the employees of DEPTNO 20.

```
select *
from emp
where deptno = 10
and sal >
(
   select max(sal)
   from emp
   where deptno = 20
);
```

98. List details of the employees of SALES department that have salary greater than that of an employee of department number 10.

```
select *
from emp
where deptno =
(
   select deptno
   from dept
   where dname = 'SALES'
)
and sal >
(
   select min(sal)
   from emp
   where deptno = 10
);
```

99. List details of the employees of SALES department that have salary greater than that of an employee of the ACCOUNTING department.

```
select *
from emp
where deptno =
(
   select deptno
   from dept
   where dname = 'SALES'
)
and sal >
(
   select min(sal)
   from emp
   where deptno =
   (
      select deptno
      from dept
      where dname = 'ACCOUNTING'
   )
);
```

100. List details of the employees of SALES department that have salary greater than that of all the employees of the ACCOUNTING department.

```
select *
from emp
where deptno =
(
   select deptno
   from dept
   where dname = 'SALES'
)
and sal >
(
   select max(sal)
   from emp
   where deptno =
   (
      select deptno
      from dept
      where dname = 'ACCOUNTING'
   )
);
```

101. List details of the departments in which there are more than 3 employees.

```
select *
from dept
where deptno in
(
   select deptno
   from emp
   group by deptno
   having count(*) > 3
);
```

102. List details of the orders in which at least 3 items were ordered.

```
select *
from ord
where ordid in
(
   select ordid
   from item
   group by ordid
   having count(*) >= 3
);
```

103. List details of the products that were ordered for more than 6 times.

```
select *
from product
where prodid in
(
   select prodid
   from item
   group by prodid
   having count(*) > 6
);
```

104. List details of the department in which the average salary of the employees is greater than the average salary of the employees of DEPTNO 20.

```
select *
from dept
where deptno in
(
   select deptno
   from emp
   group by deptno
   having avg(sal) >
   (
      select avg(sal)
      from emp
      where deptno = 20
   )
);
```

105. List details of the department in which the total salary of the employees is the highest.

```
select *
from dept
where deptno =
(
   select deptno
   from emp
   group by deptno
   having sum(sal) =
   (
      select max(sum(sal))
      from emp
      group by deptno
   )
);
```

106. List details of the department in which the total salary of the employees is the lowest.

```
select *
from dept
where deptno =
(
   select deptno
   from emp
   group by deptno
   having sum(sal) =
   (
      select min(sum(sal))
      from emp
      group by deptno
   )
);
```

107. List details of the products that have highest total order amount.

```
select *
from product
where prodid =
(
   select prodid
   from item
   group by prodid
   having sum(itemtot) =
   (
      select max(sum(itemtot))
      from item
      group by prodid
   )
);
```

108. List dates on which maximum number of orders was placed.

```
select orderdate
from ord
group by orderdate
having count(*) =
(
   select max(count(*))
   from ord
   group by orderdate
);
```

```
select EXTRACT(day FROM orderdate)
from ord
group by EXTRACT(day FROM orderdate)
having count(*) =
(
   select max(count(*))
   from ord
   group by EXTRACT(day FROM orderdate)
);
```

109. List the months in which maximum number of orders was placed.

```
select EXTRACT(month FROM orderdate)
from ord
group by EXTRACT(month FROM orderdate)
having count(*) =
(
   select max(count(*))
   from ord
   group by EXTRACT(month FROM orderdate)
);
```

110. List details of the department in which the average salary of the employees is the highest.

```
select *
from dept
where deptno IN
(
   select deptno
   from emp
   group by deptno
   having avg(sal) =
   (
      select max(avg(sal))
      from emp
      group by deptno
   )
);
```

111. List details of the department in which the average salary of the employees is the lowest.

```
select *
from dept
where deptno IN
(
   select deptno
   from emp
   group by deptno
   having avg(sal) =
   (
      select min(avg(sal))
      from emp
      group by deptno
   )
);
```

112. List details of the departments in which there are more than 2 distinct jobs.

```
select *
from dept
where deptno IN
(
   select deptno
   from emp
   group by deptno
   having count(distinct(job)) > 2
);
```

113. List details of the customers who placed more than 3 orders.

```
select *
from customer
where custid IN
(
   select custid
   from ord
   group by custid
   having count(*) > 3
);
```

114. List details of the products that were ordered for more than 6 times.

```
select *
from product
where prodid IN
(
   select prodid
   from item
   group by prodid
   having count(*) > 6
);
```

115. List details of the orders in which more than 3 items were ordered.

```
select *
from ord
where ordid IN
(
   select ordid
   from item
   group by ordid
   having count(*) > 3
);
```

116. List details of the departments in which there are more than 1 CLERKs.

```
select *
from dept
where deptno IN
(
   select deptno
   from emp
   where job = 'CLERK'
   group by deptno
   having count(*) > 1
);
```

117. List details of the products whose total order amount is the highest among all the products.

```
select *
from product
where prodid IN
(
   select prodid
   from item
   group by prodid
   having sum(itemtot) =
   (
      select max(sum(itemtot))
      from item
      group by prodid
   )
);
```

118. List details of the products whose total order amount is the lowest among all the products.

```
select *
from product
where prodid IN
(
   select prodid
   from item
   group by prodid
   having sum(itemtot) =
   (
      select min(sum(itemtot))
      from item
      group by prodid
   )
);
```

119. List details of the customers who placed an order having the highest total amount.

```
select *
from customer
where custid IN
(
   select custid
   from ord
   where total =
   (
      select max(total)
      from ord
   )
);
```

120. List details of the customers who placed an order having the lowest total amount.

```
select *
from customer
where custid IN
(
   select custid
   from ord
   where total =
   (
      select min(total)
      from ord
   )
);
```

121. List details of the customers who placed an order having maximum number of items in it.

```
select *
from customer
where custid IN
(
   select custid
   from ord
   where ordid IN
   (
      select ordid
      from item
      group by ordid
      having count(*) =
      (
         select max(count(*))
         from item
         group by ordid
      )
   )
);
```

122. List details of the customers who placed an order having least number of items in it.

```
select *
from customer
where custid IN
(
   select custid
   from ord
   where ordid IN
   (
      select ordid
      from item
      group by ordid
      having count(*) =
      (
         select min(count(*))
         from item
         group by ordid
      )
   )
);
```

123. List details of the employees who have maximum number of customers assigned to them.

```
select *
from emp
where empno IN
(
   select repid
   from customer
   group by repid
   having count(*) =
   (
      select max(count(*))
      from customer
      group by repid
   )
);
```

124. List details of the employees who have maximum number of subordinates to them.

```
select *
from emp
where empno IN
(
   select mgr
   from emp
   group by mgr
   having count(*) =
   (
      select max(count(*))
      from emp
      group by mgr
   )
);
```

125. List the year in which maximum number of employees joined the company.

```
select EXTRACT(year from hiredate)
from emp
group by EXTRACT(year from hiredate)
having count(*) =
(
   select max(count(*))
   from emp
   group by EXTRACT(year from hiredate)
);
```

126. List details of the departments in which there are maximum number of CLERKs.

```
select *
from dept
where deptno IN
(
   select deptno
   from emp
   where job = 'CLERK'
   group by deptno
   having count(*) =
   (
      select max(count(*))
      from emp
      where job = 'CLERK'
      group by deptno
   )
);
```

127. List details of the customer(s) who placed the first order.

```
select *
from customer
where custid IN
(
   select custid
   from ord
   where orderdate =
   (
      select min(orderdate)
      from ord
   )
);
```

128. List details of the customer(s) who placed the last order.

```
select *
from customer
where custid IN
(
   select custid
   from ord
   where orderdate =
   (
      select max(orderdate)
      from ord
   )
);
```

129. List details of the employees who were the first to join the company.

```
select *
from emp
where empno IN
(
   select empno
   from emp
   where hiredate =
   (
      select min(hiredate)
      from emp
   )
);
```

130. List details of the employees who were the last to join the company.

```
select *
from emp
where empno IN
(
   select empno
   from emp
   where hiredate =
   (
      select max(hiredate)
      from emp
   )
);
```

131. List details of the order(s) that was placed first.

```
select *
from ord
where ordid IN
(
   select ordid
   from ord
   where orderdate =
   (
      select min(orderdate)
      from ord
   )
);
```

132. List details of the order(s) that was placed last.

```
select *
from ord
where ordid IN
(
   select ordid
   from ord
   where orderdate =
   (
      select max(orderdate)
      from ord
   )
);
```

133. List details of the order(s) in which highest number of items are there.

```
select *
from ord
where ordid IN
(
   select ordid
   from item
   group by ordid
   having count(*) =
   (
      select max(count(*))
      from item
      group by ordid
   )
);
```

134. List details of the order(s) in which lowest number of items are there.

```
select *
from ord
where ordid IN
(
   select ordid
   from item
   group by ordid
   having count(*) =
   (
      select min(count(*))
      from item
      group by ordid
   )
);
```

135. List details of the products that were ordered in the first order.

```
select *
from product
where prodid IN
(
   select prodid
   from item
   where ordid =
   (
      select ordid
      from ord
      where orderdate =
      (
         select min(orderdate)
         from ord
      )
   )
);
```

136. List details of the products that were ordered in the last order.

```
select *
from product
where prodid IN
(
   select prodid
   from item
   where ordid =
   (
      select ordid
      from ord
      where orderdate =
      (
         select max(orderdate)
         from ord
      )
   )
);
```

137. List details of the products that have been ordered the most (in terms of quantity).

```
select *
from product
where prodid IN
(
   select prodid
   from item
   group by prodid
   having sum(qty) =
   (
      select max(sum(qty))
      from item
      group by prodid
   )
);
```

138. List details of the products that have been ordered the least (in terms of quantity).

```
select *
from product
where prodid IN
(
   select prodid
   from item
   group by prodid
   having sum(qty) =
   (
      select min(sum(qty))
      from item
      group by prodid
   )
);
```

139. List details of the employees whose customer placed the first order.

```
select *
from emp
where empno =
(
   select repid
   from customer
   where custid =
   (
      select custid
      from ord
      where orderdate =
      (
         select min(orderdate)
         from ord
      )
   )
);
```

140. List details of the employees whose customer placed the last order.

```
select *
from emp
where empno =
(
   select repid
   from customer
   where custid =
   (
      select custid
      from ord
      where orderdate =
      (
         select max(orderdate)
         from ord
      )
   )
);
```

141. List details of the MANAGER who was the first to join.

```
select *
from emp
where job = 'MANAGER'
and hiredate =
(
   select min(hiredate)
   from emp
   where job = 'MANAGER'
);
```

142. List details of the MANAGER who was the last to join.

```
select *
from emp
where job = 'MANAGER'
and hiredate =
(
   select max(hiredate)
   from emp
   where job = 'MANAGER'
);
```

143. List details of the orders having total order amount greater than the average order amount.

```
select *
from ord
where total >
(
   select avg(total)
   from ord
);
```

144. List the month and year in which maximum number of employees joined the company.

```
select hiredate
from emp
group by hiredate
having count(*) =
(
   select max(count(*))
   from emp
   group by hiredate
);
```

→ for month only

```
select EXTRACT(month from hiredate)
from emp
group by EXTRACT(month from hiredate)
having count(*) =
(
   select max(count(*))
   from emp
   group by EXTRACT(month from hiredate)
);
```

→ for year only

```
select EXTRACT(year from hiredate)
from emp
group by EXTRACT(year from hiredate)
having count(*) =
(
   select max(count(*))
   from emp
   group by EXTRACT(year from hiredate)
);
```

145. List details of the customers that are having maximum creditlimit.

```
select *
from customer
where creditlimit =
(
   select max(creditlimit)
   from customer
);
```

4. QUERIES USING JOIN :-

146. List employee number, employee name, department number and department name of all the employees.

```
select empno, ename, d.deptno, dname
from dept d, emp e
where d.deptno = e.deptno;
```

147. List details of the employees of SALES department.

```
select e.*
from dept d, emp e
where d.deptno = e.deptno
and d.dname = 'SALES';
```

148. List details of the departments that have at least one employee.

```
select distinct d.*
from dept d, emp e
where d.deptno = e.deptno;
```

149. List details of the employees of KING's department.

```
select e1.*
from emp e1, emp e2
where e1.deptno = e2.deptno
and e1.ename <> 'KING'
and e2.ename = 'KING';
```

150. List details of the customers along with their representative's name.

```
select c.*, e.ename
from emp e, customer c
where e.empno = c.repid;
```

151. List details of the employees of DEPTNO 20 having same job as that of JAMES.

```
select e1.*
from emp e1, emp e2
where e2.ename = 'JAMES'
and e1.job = e2.job
and e1.deptno = 20;
```

152. List employee no., employee name, manager's no. & manager's name of all the employees.

```
select e1.empno, e1.ename, e1.mgr, e2.ename
from emp e1, emp e2
where e1.mgr = e2.empno;
```

153. List details of the employees who have at least one subordinate (i.e. they are managers of some employee).

```
select distinct e1.*
from emp e1, emp e2
where e1.empno = e2.mgr;
```

154. List details of the employees who are earning more than their manager.

```
select e1.*
from emp e1, emp e2
where e1.mgr = e2.empno
and e1.sal > e2.sal;
```

155. List details of the employees who joined before their manager joined.

```
select e1.*
from emp e1, emp e2
where e1.mgr = e2.empno
and e1.hiredate < e2.hiredate;
```

156. List details of employees of DEPTNO 10 having same job as an employee of SALES department.

```
select e1.*
from emp e1, emp e2, dept d
where e1.deptno = 10
and e1.job = e2.job
and e2.deptno = d.deptno
and d.dname = 'SALES';
```

157. List details of employees of ACCOUNTING department having same job as an employee of SALES department.

```
select e1.*
from emp e1, emp e2, dept d1, dept d2
where e1.deptno = d1.deptno
and d1.dname = 'ACCOUNTING'
and e1.job = e2.job
and e2.deptno = d2.deptno
and d2.dname = 'SALES';
```

158. List department details and total number of employees in each department.

```
select d.deptno, d.dname, d.loc, count(*)
from dept d, emp e
where d.deptno = e.deptno
group by d.deptno,d.dname,d.loc;
```

159. List EMPNO, ENAME, JOB and number of subordinates of employees who have at least one subordinate.

```
select e1.empno, e1.ename, e1.job, count(*)
from emp e1, emp e2
where e1.empno = e2.mgr
group by e1.empno, e1.ename, e1.job;
```

160. List details of the employees (list only EMPNO, ENAME and JOB) who have at least three subordinates.

```
select e1.empno, e1.ename, e1.job, count(*)
from emp e1, emp e2
where e1.empno = e2.mgr
group by e1.empno, e1.ename, e1.job
having count(*) >= 3;
```

161. List details of the employees who are manager of at least one employee but whose designation is not MANAGER.

```
select e1.empno, e1.ename, e1.job, e1.mgr, e1.hiredate, e1.sal, e1.comm, e1.deptno, count(*)
from emp e1, emp e2
where e1.empno = e2.mgr
and e1.job <> 'MANAGER'
group by e1.empno, e1.ename, e1.job, e1.mgr, e1.hiredate, e1.sal, e1.comm, e1.deptno;
```

162. List details of the customers (list only CUSTID, NAME and CITY) along with their corresponding representative's details (list only EMPNO, ENAME and JOB).

```
select c.custid, c.name, c.city, e.empno, e.ename, e.job
from customer c, emp e
where c.repid = e.empno;
```

163. List details of the customers (list only CUSTID, NAME and CITY) who have placed more than three orders.

```
select c.custid, c.name, c.city
from customer c, ord o
where c.custid = o.custid
group by c.custid, c.name, c.city
having count(*) > 3;
```

164. List details of the employees that have at least one customer assigned to them and that at least one of these customers has placed at least one order.

```
select distinct e.*
from emp e, customer c, ord o
where e.empno = c.repid
and c.custid = o.custid;
```

5. QUERIES USING CO-RELATED SUBQUERY :-

165. List details of the employees having salary greater than the average salary of their corresponding department.

```
select *
from emp e
where sal >
(
   select avg(sal)
   from emp
   group by e.deptno
);
```

166. List details of the employees having salary greater than their manager's salary.

```
select *
from emp e
where sal >
(
   select sal
   from emp
   where empno = e.mgr
);
```

167. List details of the departments having at least one employee.

```
select *
from dept d
where deptno IN
(
   select deptno
   from emp
   where deptno = d.deptno
);
```

168. List details of the departments having more than three employees.

```
select *
from dept d
where 3 <
(
   select count(*)
   from emp
   where deptno = d.deptno
);
```

169. List details of the employees who have at least 3 subordinates.

```
select *
from emp e
where 3 <=
(
   select count(*)
   from emp
   where mgr = e.empno
);
```

170. List details of the employees having at least one customer assigned to him.

```
select *
from emp e
where empno IN
(
   select repid
   from customer
   where repid = e.empno
);
```

171. List details of the products that were ordered for more than 6 times.

```
select *
from product p
where 6 <
(
   select count(*)
   from item
   where prodid = p.prodid
);
```