

SUB QUERIES WITH ANSWER

SQL QUERIES ON SUB-QUERIES AND JOIN

1. List the departments which does not have employee at all.

select dname from dept where deptno not in (select deptno from emp);

DNAME

OPERATIONS

2.Display all the employees whose job is same as scott.

SELECT * FROM EMP WHERE JOB = (SELECT JOB FROM EMP WHERE ENAME='SCOTT');

	EMPNO	ENAME	JOB	MGR
	HIREDATE	SAL	COMM	DEPTNO
	7788	SCOTT	ANALYST	7566 19-APR-
87	3000		20	
	7902	FORD	ANALYST	7566 03-DEC-
81	3000		20	

3.Display scott's manager's manager'S department name.

SELECT DNAME FROM DEPT WHERE DEPTNO IN(SELECT DEPTNO FROM EMP WHERE EMPNO IN(SELECT MGR
2 FROM EMP WHERE EMPNO IN(SELECT MGR FROM EMP WHERE ENAME='SCOTT')));

DNAME

ACCOUNTING

4.List employess whose job is same as scott and their salary greater than smith's salary.

```
SELECT * FROM EMP WHERE JOB =(SELECT JOB FROM EMP
WHERE ENAME='SCOTT') AND SAL >(SELECT SAL FROM EMP
WHERE ENAME='SMITH');
```

EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	DEPTNO
7788	SCOTT	ANALYST	7566 19-APR-
87	3000	20	
7902	FORD	ANALYST	7566 03-DEC-
81	3000	20	

5.Display all the employees whose job is same as scott and allen.

```
SELECT * FROM EMP WHERE JOB IN (SELECT JOB FROM EMP
WHERE ENAME IN('SCOTT','ALLEN'));
```

EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	DEPTNO
7844	TURNER	SALESMAN	7698 08-SEP-
81	1500	0 30	
7654	MARTIN	SALESMAN	7698 28-SEP-
81	1250	1400 30	
7521	WARD	SALESMAN	7698 22-FEB-
81	1250	500 30	
7499	ALLEN	SALESMAN	7698 20-FEB-
81	1600	300 30	
7902	FORD	ANALYST	7566 03-DEC-
81	3000	20	
7788	SCOTT	ANALYST	7566 19-APR-
87	3000	20	

6.Display all employees who are actual managers.

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

EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	DEPTNO
7566	JONES	MANAGER	7839 02-APR-
81	2975	20	

81	7698 BLAKE	MANAGER	7839 01-MAY-
	2850	30	
81	7782 CLARK	MANAGER	7839 09-JUN-
	2450	10	
87	7788 SCOTT	ANALYST	7566 19-APR-
	3000	20	
81	7839 KING	PRESIDENT	17-NOV-
	5000	10	
81	7902 FORD	ANALYST	7566 03-DEC-
	3000	20	

7. Display who are all employees reporting to scott.

select * from emp where mgr=(select empno from emp where ename='SCOTT');

	EMPNO	ENAME	JOB	MGR
	HIREDATE	SAL	COMM	DEPTNO
87	7876 ADAMS	CLERK	7788 23-MAY-	
	1100	20		

8. Select 2nd maximum salary.

SELECT MAX(SAL) FROM EMP WHERE SAL<(SELECT MAX(SAL) FROM EMP);

MAX(SAL)

3000

9. select 3rd maximum salary.

SELECT MAX(SAL) FROM EMP WHERE SAL<(SELECT MAX(SAL) FROM EMP WHERE SAL<(SELECT MAX(SAL) FROM EMP));

MAX(SAL)

2975

10.Display all the employees who earn more than all the managers(job).

select * from emp where sal> all (select sal from emp where job='MANAGER');

EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	DEPTNO
87	7788 SCOTT	ANALYST	7566 19-APR-87
81	7839 KING	PRESIDENT	17-NOV-81
81	7902 FORD	ANALYST	7566 03-DEC-81
	3000	20	
	5000	10	
	3000	20	

11.Display all the employees who earn more than any the managers(job).

select * from emp where sal> any (select sal from emp where job='MANAGER');

EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	DEPTNO
81	7839 KING	PRESIDENT	17-NOV-81
81	7902 FORD	ANALYST	7566 03-DEC-81
	5000	10	
	3000	20	
87	7788 SCOTT	ANALYST	7566 19-APR-87
	3000	20	
81	7566 JONES	MANAGER	7839 02-APR-81
	2975	20	
81	7698 BLAKE	MANAGER	7839 01-MAY-81
	2850	30	

12.Display empno,job and salary of all the analyst who are earning more than any of the manager

select empno,job,sal from emp where job='ANALYST' and sal>any(select sal from emp where job='MANAGER');

EMPNO	JOB	SAL
7902	ANALYST	3000

13.select the department name and location of all employees working for clark

```
select dname,loc from dept where deptno in(select deptno from emp
where mgr in(select empno from emp where ename='CLARK'));
```

```
DNAME      LOC
-----
ACCOUNTING  NEW YORK
```

14. select all the employees working in dallas.

```
select * from emp where deptno in(select deptno from dept where
loc='DALLAS')
```

```
EMPNO ENAME      JOB          MGR
HIREDATE      SAL      COMM      DEPTNO
-----
 7369 SMITH      CLERK        7902 17-DEC-
80      800          20
 7566 JONES      MANAGER      7839 02-APR-
81      2975          20
 7788 SCOTT      ANALYST      7566 19-APR-
87      3000          20
 7876 ADAMS      CLERK        7788 23-MAY-
87      1100          20
 7902 FORD      ANALYST      7566 03-DEC-
81      3000          20
```

15.Display all the employees whose salary is greater than average salary of deartment 20.

```
select * from emp where sal>(select avg(sal) from emp where
deptno=20);
```

	EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	DEPTNO	

	7566	JONES	MANAGER	7839 02-APR-
81	2975		20	
	7698	BLAKE	MANAGER	7839 01-MAY-
81	2850		30	
	7782	CLARK	MANAGER	7839 09-JUN-
81	2450		10	
	7788	SCOTT	ANALYST	7566 19-APR-
87	3000		20	
	7839	KING	PRESIDENT	17-NOV-
81	5000		10	
	7902	FORD	ANALYST	7566 03-DEC-
81	3000		20	

16.select all the employees who gets maximum salary.

select * from emp where sal=(select max(sal) from emp);

	EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	DEPTNO	

	7839	KING	PRESIDENT	17-NOV-
81	5000		10	

17.Display first employee record based on hiredate.

select * from emp where hiredate=(select min(hiredate) from emp);

	EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	DEPTNO	

	7369	SMITH	CLERK	7902 17-DEC-
80	800		20	

18.list the employees who have salary greater than Allen.

select * from emp where sal >(select sal from emp where ename='ALLEN');

	EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	DEPTNO	

```

-----
      7566 JONES      MANAGER      7839 02-APR-
81      2975              20
      7698 BLAKE      MANAGER      7839 01-MAY-
81      2850              30
      7782 CLARK      MANAGER      7839 09-JUN-
81      2450              10
      7788 SCOTT      ANALYST      7566 19-APR-
87      3000              20
      7839 KING      PRESIDENT      17-NOV-
81      5000              10
      7902 FORD      ANALYST      7566 03-DEC-
81      3000              20

```

19.list the daprtment names which are having analysts.

select dname from dept where deptno in(select deptno from emp
where job ='ANALYST')

DNAME

RESEARCH

20.List the department names which have salesman in it.

select dname from dept where deptno in(select deptno from emp
where job='SALESMAN')

DNAME

SALES

**21.Display the employees whose location which has atleast one
o in it.**

select * from emp where deptno in (select deptno from dept where
loc like '%O%');

```

      EMPNO ENAME      JOB      MGR
HIREDATE      SAL      COMM      DEPTNO
-----
      7499 ALLEN      SALESMAN      7698 20-FEB-
81      1600      300      30

```

	7521	WARD	SALESMAN	7698	22-FEB-
81	1250	500	30		
	7654	MARTIN	SALESMAN	7698	28-SEP-
81	1250	1400	30		
	7698	BLAKE	MANAGER	7839	01-MAY-
81	2850		30		
	7782	CLARK	MANAGER	7839	09-JUN-
81	2450		10		
	7839	KING	PRESIDENT		17-NOV-
81	5000		10		
	7844	TURNER	SALESMAN	7698	08-SEP-
81	1500	0	30		
	7900	JAMES	CLERK	7698	03-DEC-
81	950		30		
	7934	MILLER	CLERK	7782	23-JAN-
82	1300		10		

22. List the department names that are having at least one employee in it.

select dname from dept where deptno in (select deptno from emp group by deptno having count(*)>=1)

DNAME

SALES

RESEARCH

ACCOUNTING

23. list the department names having atleast 4 employees in it.

select dname from dept where deptno in (select deptno from emp group by deptno having count(*)>=4);

DNAME

SALES

RESEARCH

24. Display the department names which are having at least 2 Clerks in it.

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

DNAME

RESEARCH

25. Query to display the employee names who is having maximum salary in Dept Name "Accounting"

SELECT ENAME FROM EMP WHERE SAL = (SELECT MAX(SAL) FROM EMP WHERE DEPTNO =(SELECT DEPTNO FROM DEPT WHERE DNAME='ACCOUNTING')) ;

ENAME

KING

26. Query to display the Dept Name who is having Highest Commission

SELECT DNAME FROM DEPT WHERE DEPTNO = (SELECT DEPTNO FROM EMP WHERE COMM =(SELECT MAX(COMM) FROM EMP));

DNAME

SALES

27. Query to display all the employees whose Dept Number is same as Scott.

SELECT * FROM EMP WHERE DEPTNO = (SELECT DEPTNO FROM EMP WHERE ENAME = 'SCOTT');

	EMPNO	ENAME	JOB	MGR
	HIREDATE	SAL	COMM	DEPTNO

	7369	SMITH	CLERK	7902 17-DEC-
80	800		20	
	7566	JONES	MANAGER	7839 02-APR-
81	2975		20	
	7788	SCOTT	ANALYST	7566 19-APR-
87	3000		20	

87	7876 ADAMS	CLERK	7788 23-MAY-
	1100	20	
81	7902 FORD	ANALYST	7566 03-DEC-
	3000	20	

28.Display all the employees in 'Operations and Accounting' Dept.
list the employees who has salary greater than miller

```
SELECT * FROM EMP WHERE DEPTNO IN ( SELECT DEPTNO
FROM DEPT WHERE DNAME IN (
'OPERATIONS','ACCOUNTING')) AND
SAL > ( SELECT SAL FROM EMP WHERE ENAME ='MILLER');
```

	EMPNO	ENAME	JOB	MGR
	HIREDATE	SAL	COMM	DEPTNO
81	7782	CLARK	MANAGER	7839 09-JUN-
	2450		10	
81	7839	KING	PRESIDENT	17-NOV-
	5000		10	

29. List department name having atleast 3 salesman

```
SELECT DNAME FROM DEPT WHERE DEPTNO IN( SELECT
DEPTNO FROM EMP WHERE JOB='SALESMAN' GROUP BY DE
PTNO HAVING COUNT(*)>=3);
```

DNAME

SALES

30.Display all employess who do not have any reporter.

```
select * from emp where mgr is null;
king
```

31. display all the employees who are not managers.

```
SELECT * FROM EMP WHERE EMPNO NOT IN ( SELECT MGR
FROM EMP WHERE MGR IS NOT NULL);
EMPNO ENAME    JOB          MGR
HIREDATE      SAL    COMM    DEPTNO
```

7369	SMITH	CLERK	7902	17-DEC-
80	800	20		
7499	ALLEN	SALESMAN	7698	20-FEB-
81	1600	300 30		
7521	WARD	SALESMAN	7698	22-FEB-
81	1250	500 30		
7654	MARTIN	SALESMAN	7698	28-SEP-
81	1250	1400 30		
7844	TURNER	SALESMAN	7698	08-SEP-
81	1500	0 30		
7876	ADAMS	CLERK	7788	23-MAY-
87	1100	20		
7900	JAMES	CLERK	7698	03-DEC-
81	950	30		
7934	MILLER	CLERK	7782	23-JAN-
82	1300	10		

31. List all the employees who are reporting to jones manager

```
SELECT * FROM EMP WHERE empno =(SELECT mgr FROM
EMP WHERE ENAME ='JONES');
```

EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	DEPTNO
7788	SCOTT	ANALYST	7566 19-APR-
87	3000	20	
7902	FORD	ANALYST	7566 03-DEC-
81	3000	20	

32. list employees from research&accounting having atleast 2 reporting.

```
SELECT * FROM EMP WHERE DEPTNO IN( SELECT DEPTNO
FROM DEPT WHERE DNAME IN ('RESEARCH','ACCOUNTING'))
AND EMPNO IN ( SELECT MGR FROM EMP GROUP BY MGR
HAVING COUNT(*)>=2);
```

EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	DEPTNO

	7839 KING	PRESIDENT	17-NOV-
81	5000	10	
	7566 JONES	MANAGER	7839 02-APR-
81	2975	20	

33. Display the departname of the employee whose name starts with S and salary between 1500 to 3000.

```
SELECT DNAME FROM DEPT WHERE DEPTNO IN ( SELECT
DEPTNO FROM EMP WHERE ENAME LIKE 'S%' AND SAL
BETWEEN 1500 AND 3000);
```

DNAME

RESEARCH

34. Display location of employee whose salary is minimum salary but salary is greater than 2000

```
SELECT LOC FROM DEPT WHERE DEPTNO IN (SELECT
DEPTNO FROM EMP WHERE SAL IN( SELECT MIN(SAL) FROM
EMP WHERE SAL>2000));
```

LOC

NEW YORK

35. Display the location of an employee in accounting department.

```
SELECT LOC FROM DEPT WHERE DEPTNO = (SELECT
DEPTNO FROM DEPT WHERE DNAME='ACCOUNTING');
```

LOC

NEW YORK

36. Display the department location that are having greater than four employees in it.

```
SELECT LOC FROM DEPT WHERE DEPTNO IN (SELECT
DEPTNO FROM EMP GROUP BY DEPTNO HAVING
COUNT(*)>4);
```

LOC

CHICAGO
DALLAS

37. Write a query to display all the employee whose job not same as Allen and salary is greater than Martin.

```
select * from emp where Job !=(select job from emp where  
ename='ALLEN') AND SAL >(SELECT SAL FROM EMP WHERE  
ENAME='MARTIN');
```

	EMPNO	ENAME	JOB	MGR
	HIREDATE	SAL	COMM	DEPTNO

	7566	JONES	MANAGER	7839 02-APR-
81	2975		20	
	7698	BLAKE	MANAGER	7839 01-MAY-
81	2850		30	
	7782	CLARK	MANAGER	7839 09-JUN-
81	2450		10	
	7788	SCOTT	ANALYST	7566 19-APR-
87	3000		20	
	7839	KING	PRESIDENT	17-NOV-
81	5000		10	
	7902	FORD	ANALYST	7566 03-DEC-
81	3000		20	
	7934	MILLER	CLERK	7782 23-JAN-
82	1300		10	

38. Display all the employees who is having location same as Adam's manager.

```
SELECT * FROM EMP WHERE DEPTNO =(SELECT DEPTNO  
FROM DEPT WHERE LOC =(SELECT LOC FROM DEPT WHERE  
DEPTNO =(SELECT DEPTNO FROM EMP WHERE EMPNO =  
(SELECT MGR FROM EMP WHERE ENAME='ADAMS'))));
```

	EMPNO	ENAME	JOB	MGR
	HIREDATE	SAL	COMM	DEPTNO

	7369	SMITH	CLERK	7902 17-DEC-
80	800		20	

	7566 JONES	MANAGER	7839 02-APR-
81	2975	20	
	7788 SCOTT	ANALYST	7566 19-APR-
87	3000	20	
	7876 ADAMS	CLERK	7788 23-MAY-
87	1100	20	
	7902 FORD	ANALYST	7566 03-DEC-
81	3000	20	

39. Display the job, manager of employees who is working for Jones
 SELECT JOB, ENAME,MGR FROM EMP WHERE MGR =(SELECT
 EMPNO FROM EMP WHERE ENAME='JONES');

JOB	ENAME	MGR
-----	-----	-----
ANALYST	SCOTT	7566
ANALYST	FORD	7566

40. Display the employee names, higher date, commission of Ford's
 manager

SELECT ENAME ,HIREDATE ,COMM FROM EMP WHERE
 EMPNO =(SELECT MGR FROM EMP WHERE ENAME = 'FORD');

ENAME	HIREDATE	COMM
-----	-----	-----
JONES	02-APR-81	

41.Display the number of employees who are getting salary less
 then Blake's MANAGER salary.

SELECT COUNT(ENAME) FROM EMP WHERE SAL<(SELECT
 SAL FROM EMP WHERE EMPNO=(SELECT MGR FROM EMP
 WHERE ENAME='BLAKE'));

COUNT(ENAME)

13

42.List the employess who are located in chicago and their
 commission is zero.

```
SELECT COUNT(*) FROM EMP WHERE COMM=0 AND
DEPTNO IN (SELECT DEPTNO FROM DEPT WHERE
LOC='CHICAGO');
COUNT(*)
```

```
-----
1
```

43. List employees who work for sales department and their salary greater than average salary of their department.

```
SELECT * FROM EMP WHERE DEPTNO = (SELECT DEPTNO
FROM DEPT WHERE DNAME='SALES') AND SAL > ANY
(SELECT
AVG(SAL) FROM EMP GROUP BY DEPTNO);
```

	EMPNO	ENAME	JOB	MGR	
	HIREDATE	SAL	COMM	DEPTNO	
	7499	ALLEN	SALESMAN	7698	20-FEB-
81	1600	300	30		
	7698	BLAKE	MANAGER	7839	01-MAY-
81	2850		30		

44. List employees who are working in research department and they are manager.

```
SELECT ENAME FROM EMP WHERE DEPTNO =(SELECT
DEPTNO FROM DEPT WHERE DNAME='RESEARCH') AND
EMPNO IN (SELECT MGR FROM EMP);
ENAME
```

```
-----
JONES
SCOTT
FORD
```

45. Display department name of the employees who earn commission.

```
SELECT DNAME FROM DEPT WHERE DEPTNO IN (SELECT
DEPTNO FROM EMP WHERE COMM IS NOT NULL);
```

```
DNAME
-----
```

SALES

46.Display department name of the employee who earn maximum salary and have no reporting manager.

```
SELECT DNAME FROM DEPT WHERE DEPTNO IN ( SELECT
DEPTNO FROM EMP WHERE MGR IS NULL AND SAL=(SELECT
MAX(SAL) FROM EMP));
```

DNAME

ACCOUNTING

47.Display employee details who are reporting to blake and have commission without using null or not null.

```
SELECT * FROM EMP WHERE MGR IN (SELECT EMPNO FROM
EMP WHERE ENAME='BLAKE') AND COMM IS NOT NULL;
```

	EMPNO	ENAME	JOB	MGR	
	HIREDATE	SAL	COMM	DEPTNO	
	-----	-----	-----	-----	-----
	7499	ALLEN	SALESMAN	7698	20-FEB-
81	1600	300	30		
	7521	WARD	SALESMAN	7698	22-FEB-
81	1250	500	30		
	7654	MARTIN	SALESMAN	7698	28-SEP-
81	1250	1400	30		
	7844	TURNER	SALESMAN	7698	08-SEP-
81	1500	0	30		

48.List all the deprtnaments and loc of all the salesman's manager's manager.

```
SELECT DNAME ,LOC FROM DEPT WHERE DEPTNO
IN(SELECT DEPTNO FROM EMP WHERE EMPNO IN( SELECT
MGR
FROM EMP WHERE EMPNO IN(SELECT MGR FROM EMP
WHERE JOB='SALESMAN')));
```

DNAME LOC

ACCOUNTING NEW YORK

49. List the employee deptname and loc of all the employees who are clerk, reporting to Blake and salary is lesser than Martin's salary

```
SELECT DNAME, LOC FROM DEPT WHERE DEPTNO IN
(SELECT DEPTNO FROM EMP WHERE JOB='CLERK' AND MGR
IN (SELECT EMPNO FROM EMP WHERE ENAME='BLAKE' )
AND SAL < (SELECT SAL FROM EMP WHERE
ENAME='MARTIN'));
```

DNAME	LOC
SALES	CHICAGO

50. List the employees who do not directly report to president, have commission and salary more than max salary of all the clerk without using null or not null.

```
SELECT ENAME FROM EMP WHERE MGR != (SELECT EMPNO
FROM EMP WHERE JOB='PRESIDENT') AND COMM IS NOT
NULL
```

```
AND SAL > ALL(SELECT MAX(SAL) FROM EMP WHERE
JOB='CLERK' );
```

no rows selected

51. List the employees who joined after 2 years of first employee of the company and more than Blake's salary.

```
SELECT * FROM EMP WHERE HIREDATE > ALL(SELECT
MIN(HIREDATE) + (365*2) FROM EMP) AND SAL > (SELECT SAL
FROM EMP WHERE ENAME='BLAKE');
```

EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	DEPTNO

7788	SCOTT	ANALYST	7566	19-APR-
87	3000	20		

52. Display location of all the employees who are reporting to Blake.

```
SELECT LOC FROM DEPT WHERE DEPTNO IN( SELECT
DEPTNO FROM EMP WHERE MGR =(SELECT EMPNO FROM
EMP WHERE ENAME='BLAKE'));
```

LOC

CHICAGO

53. List all the employees whose job is same as jones and their salary lesser than scott.

```
SELECT * FROM EMP WHERE JOB=(SELECT JOB FROM EMP
WHERE ENAME='JONES') AND SAL<(SELECT SAL FROM EMP
WHERE ENAME='SCOTT');
```

	EMPNO	ENAME	JOB	MGR
	HIREDATE	SAL	COMM	DEPTNO
	7566	JONES	MANAGER	7839 02-APR-
81	2975		20	
	7698	BLAKE	MANAGER	7839 01-MAY-
81	2850		30	
	7782	CLARK	MANAGER	7839 09-JUN-
81	2450		10	

54. Display the king's first year salary and his location with department.

```
SELECT SAL*12 AS first_year_sal,DNAME,LOC FROM
EMP,DEPT WHERE EMP.DEPTNO=DEPT.DEPTNO AND
ENAME='KING';
```

FIRST_YEAR_SAL	DNAME	LOC
60000	ACCOUNTING	NEW YORK

55. Display all the employees of department 30, 20 with their anual salary and having atleast 3 employees.

```
SELECT SAL*12 AS ANUAL_SAL, ENAME FROM EMP WHERE
DEPTNO IN(20,30) AND DEPTNO IN (SELECT DEPTNO FROM
EMP GROUP BY DEPTNO HAVING COUNT(*)>=3);
```

ANUAL_SAL	ENAME
11400	JAMES
18000	TURNER

34200 BLAKE
 15000 MARTIN
 15000 WARD
 19200 ALLEN
 36000 FORD
 13200 ADAMS
 36000 SCOTT
 35700 JONES
 9600 SMITH

56. Display department name which is having second highest average salary and third highest induvidul salary.

57. Display all the employees who are earning less than any of the salesman.

SELECT * FROM EMP WHERE SAL < ANY(SELECT SAL FROM EMP WHERE JOB='SALESMAN');

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	17-DEC-	800	20	
7900	JAMES	CLERK	7698	03-DEC-	950	30	
7876	ADAMS	CLERK	7788	23-MAY-	1100	20	
7521	WARD	SALESMAN	7698	22-FEB-	1250	500 30	
7654	MARTIN	SALESMAN	7698	28-SEP-	1250	1400 30	
7934	MILLER	CLERK	7782	23-JAN-	1300	10	
7844	TURNER	SALESMAN	7698	08-SEP-	1500	0 30	

58. Display all the employees who are joined before the last person

SELECT * FROM EMP WHERE HIREDATE < (SELECT MAX(HIREDATE) FROM EMP);

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	17-DEC-			
80	800	20					
7499	ALLEN	SALESMAN	7698	20-FEB-			
81	1600	300 30					
7521	WARD	SALESMAN	7698	22-FEB-			
81	1250	500 30					
7566	JONES	MANAGER	7839	02-APR-			
81	2975	20					
7654	MARTIN	SALESMAN	7698	28-SEP-			
81	1250	1400 30					
7698	BLAKE	MANAGER	7839	01-MAY-			
81	2850	30					
7782	CLARK	MANAGER	7839	09-JUN-			
81	2450	10					
7788	SCOTT	ANALYST	7566	19-APR-			
87	3000	20					
7839	KING	PRESIDENT		17-NOV-			
81	5000	10					
7844	TURNER	SALESMAN	7698	08-SEP-			
81	1500	0 30					
7900	JAMES	CLERK	7698	03-DEC-			
81	950	30					
7902	FORD	ANALYST	7566	03-DEC-			
81	3000	20					
7934	MILLER	CLERK	7782	23-JAN-			
82	1300	10					

59.Display last but one employee record

```

sSELECT * FROM EMP WHERE HIREDATE =(SELECT
MAX(HIREDATE FROM EMP WHERE HIREDATE<(SELECT
MAX(HIREDATE) FROM EMP));
sSELECT * FROM EMP WHERE HIREDATE =(SELECT
MAX(HIREDATE) FROM EMP WHERE HIREDATE<(SELECT
MAX(HIREDATE) FROM EMP))

```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7788	SCOTT	ANALYST	7566	19-APR-87	3000		20

60.Find third minimum salary in the employee table

```
SELECT MIN(SAL) FROM EMP WHERE SAL > (SELECT MIN(SAL)
FROM EMP WHERE SAL > (SELECT MIN(SAL) FROM EMP));
```

```
MIN(SAL)
-----
1100
```

61.Display all the employees who are earning more than any of the manager.

```
select * from emp where sal > ANY (select sal from emp where job
='MANAGER');
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESIDENT		17-NOV-			
81	5000	10					
7902	FORD	ANALYST	7566	03-DEC-			
81	3000	20					
7788	SCOTT	ANALYST	7566	19-APR-			
87	3000	20					
7566	JONES	MANAGER	7839	02-APR-			
81	2975	20					
7698	BLAKE	MANAGER	7839	01-MAY-			
81	2850	30					

```
SQL> select * from emp where sal > ANY (select sal FROM EMP
WHERE EMPNO IN (SELECT MGR FROM EMP));
```

EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	
7839	KING	PRESIDENT	17-NOV-81
10			5000
7902	FORD	ANALYST	7566 03-DEC-81
20			3000
7788	SCOTT	ANALYST	7566 19-APR-87
20			3000

EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	
7566	JONES	MANAGER	7839 02-APR-81
20			2975
7698	BLAKE	MANAGER	7839 01-MAY-81
30			2850

62. List employees who joined after 4 years of 1st employee of the company and less than blake salary.

```
SELECT ENAME FROM EMP WHERE HIREDATE > (SELECT
MIN(HIREDATE)+(365*4) FROM EMP) AND SAL< (SELECT SAL
FROM EMP WHERE ENAME='BLAKE');
```

ENAME

ADAMS

63. Display the department information of employee who is working for newyork location.

```
SELECT DNAME, DEPTNO FROM DEPT WHERE LOC ='NEW
YORK'
```

DNAME DEPTNO

ACCOUNTING 10

64. Display the salary wise employee information for deptno 20 in descending order

SELECT * FROM EMP WHERE DEPTNO=20 ORDER BY SAL
DESC;

	EMPNO	ENAME	JOB	MGR
	HIREDATE	SAL	COMM	DEPTNO
	7788	SCOTT	ANALYST	7566 19-APR-
87	3000		20	
	7902	FORD	ANALYST	7566 03-DEC-
81	3000		20	
	7566	JONES	MANAGER	7839 02-APR-
81	2975		20	
	7876	ADAMS	CLERK	7788 23-MAY-
87	1100		20	
	7369	SMITH	CLERK	7902 17-DEC-
80	800		20	

65. Display second employee record

SELECT * FROM EMP WHERE HIREDATE IN (SELECT
MIN(HIREDATE) FROM EMP WHERE HIREDATE > (SELECT
MIN(HIREDATE) FROM EMP));

	EMPNO	ENAME	JOB	MGR
	HIREDATE	SAL	COMM	DEPTNO
	7499	ALLEN	SALESMAN	7698 20-FEB-
81	1600	300	30	

66. Display location of employees, whose name start with A and salary between 1000 and 3000.

```
SELECT LOC FROM EMP,DEPT WHERE  
EMP.DEPTNO=DEPT.DEPTNO AND ENAME LIKE 'A%' AND SAL  
BETWEEN 1000 AND 3000;
```

LOC

CHICAGO

DALLAS

67.Display department name of all the employees who are reporting to Blake.

```
SELECT DNAME FROM DEPT WHERE DEPTNO IN (SELECT  
DEPTNO FROM EMP WHERE MGR IN (SELECT EMPNO FROM  
EMP WHERE ENAME='BLAKE'));
```

DNAME

SALES

68.Display Martin's Manager's Manager's department location

```
SELECT DNAME , LOC FROM DEPT WHERE DEPTNO =  
(SELECT DEPTNO FROM EMP WHERE EMPNO IN (SELECT  
MGR FROM EMP WHERE EMPNO IN (SELECT MGR  
FROM EMP WHERE ENAME ='MARTIN')));
```

DNAME LOC

ACCOUNTING NEW YORK

69. Display the employee name and their salary who joined 2 years before the last person hired.

```
SELECT ENAME,SAL FROM EMP WHERE HIREDATE IN  
(SELECT MAX(HIREDATE)-(365*2) FROM EMP);
```

ENAME

SAL

SMITH

800

ALLEN

1600

WARD

1250

JONES

2975

MARTIN

1250

BLAKE

2850

CLARK	2450
KING	5000
TURNER	1500
JAMES	950
FORD	3000
MILLER	1300

70. Display the employee name,job and department for those who don't have commission

```
SELECT ENAME,JOB, DNAME,E.DEPTNO FROM EMP E,DEPT
D WHERE E.DEPTNO=D.DEPTNO AND E.COMM IS NULL
```

ENAME	JOB	DNAME	DEPTNO
SMITH	CLERK	RESEARCH	20
JONES	MANAGER	RESEARCH	20
BLAKE	MANAGER	SALES	30
CLARK	MANAGER	ACCOUNTING	10
SCOTT	ANALYST	RESEARCH	20
KING	PRESIDENT	ACCOUNTING	10
ADAMS	CLERK	RESEARCH	20
JAMES	CLERK	SALES	30
FORD	ANALYST	RESEARCH	20
MILLER	CLERK	ACCOUNTING	10

71. Display the employee details with their location who earn maximum commission

```
SELECT * FROM EMP,DEPT WHERE
EMP.DEPTNO=DEPT.DEPTNO AND COMM IN (SELECT
MAX(COMM) FROM EMP);
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO	DEPTNO	DNAME	LOC
-------	-------	-----	-----	----------	-----	------	--------	--------	-------	-----

```

7654 MARTIN    SALESMAN    7698 28-SEP-
81    1250      1400      30    30 SALES    CHICAGO

```

72. Display all the employee whose department is sales and who is earning some commission (i.e commission is not null or zero) and whose hired before the last person hired.

```

SQL> SELECT * FROM EMP WHERE COMM IS NOT NULL AND
HIREDATE <(SELECT MAX(HIREDATE) FROM EMP)
2 AND DEPTNO IN(SELECT DEPTNO FROM DEPT WHERE
DNAME='SALES');

```

	EMPNO	ENAME	JOB	MGR
	HIREDATE	SAL	COMM	DEPTNO
81	7499	ALLEN	SALESMAN	7698 20-FEB-
	1600	300	30	
81	7521	WARD	SALESMAN	7698 22-FEB-
	1250	500	30	
81	7654	MARTIN	SALESMAN	7698 28-SEP-
	1250	1400	30	
81	7844	TURNER	SALESMAN	7698 08-SEP-
	1500	0	30	

73. Display all the department names and manager who is ward's manager's manager.

```

SELECT DNAME,MGR FROM EMP E,DEPT D WHERE
E.DEPTNO= D.DEPTNO AND EMPNO IN (SELECT MGR FROM
EMP W
HERE EMPNO IN (SELECT MGR FROM EMP WHERE
ENAME='WARD'));

```

DNAME	MGR
-------	-----

ACCOUNTING

74. Display department names and maximum commission of employee's whose salary is greater than average salary of all the clerk's

```
SELECT D.DNAME,MAX(E.COMM) FROM EMP E,DEPT D
WHERE E.DEPTNO=D.DEPTNO AND E.SAL> ALL(SELECT
AVG(SAL) FROM EMP where JOB='CLERK' GROUP BY JOB );
```

75. Display the last employee record with location.

```
SELECT ENAME,LOC FROM EMP E,DEPT D WHERE
E.DEPTNO=D.DEPTNO AND HIREDATE =(SELECT
MAX(HIREDATE)
FROM EMP);
```

```
ENAME      LOC
-----
ADAMS      DALLAS
```

76. Display the department number who working in sales department and they are manager.

```
SELECT DEPTNO FROM DEPT WHERE DEPTNO IN(SELECT
DEPTNO FROM DEPT WHERE DNAME='SALES') AND DEPTNO
IN
(SELECT DEPTNO FROM EMP WHERE JOB='MANAGER');
```

```
DEPTNO
-----
30
```

77. Display department name of the employee who earn minimum salary and have reporting manager.

```
SELECT DNAME FROM DEPT WHERE DEPTNO IN( SELECT
DEPTNO FROM EMP WHERE
SAL =( SELECT MIN( SAL) FROM EMP WHERE MGR IS NOT
NULL))
DNAME
-----
RESEARCH
```

78. Display hiredate and Dname of all the employees working for sales

```
SELECT D.DNAME,E.HIREDATE FROM EMP E, DEPT D WHERE
E.DEPTNO=D.DEPTNO AND E.DEPTNO IN (SELECT DEPTNO
FROM DEPT WHERE DNAME='SALES')
```

DNAME	HIREDATE
SALES	20-FEB-81
SALES	22-FEB-81
SALES	28-SEP-81
SALES	01-MAY-81
SALES	08-SEP-81
SALES	03-DEC-81

79. Display Location and Dname of employee who is working as president.

```
SELECT DNAME,LOC FROM DEPT WHERE DEPTNO=(SELECT
DEPTNO FROM EMP WHERE JOB='PRESIDENT');
```

DNAME	LOC
ACCOUNTING	NEW YORK\

80.Display the Dname of employees whoes salary is maximum salary but lesser than 3000

```
SELECT DNAME FROM DEPT WHERE DEPTNO IN (SELECT
DEPTNO FROM EMP WHERE SAL IN (SELECT MAX(SAL) FROM
EMP WHERE SAL IN(SELECT SAL FROM EMP WHERE
SAL<3000)));
```

```
SQL> SELECT DNAME FROM DEPT WHERE DEPTNO IN
(SELECT DEPTNO FROM EMP WHERE SAL IN (SELECT
MAX(SAL) FR
OM EMP WHERE SAL< 3000));
```

DNAME
RESEARCH

81.Display the department name who are reporting to ADAMS

```
SELECT DNAME FROM DEPT WHERE DEPTNO IN (SELECT
DEPTNO FROM EMP WHERE MGR IN( SELECT EMPNO FROM
EMP WHERE ENAME='ADAMS'));
```

no rows selected

82.Display last employee record.

```
SELECT * FROM EMP WHERE HIREDATE IN (SELECT
MAX(HIREDATE) FROM EMP);
```

	EMPNO	ENAME	JOB	MGR
	HIREDATE	SAL	COMM	DEPTNO
	7876	ADAMS	CLERK	7788 23-MAY-
87	1100		20	

83.Display all the employee whose salary is greater than average salary of department 30.

```
SELECT * FROM EMP WHERE SAL>(SELECT AVG(SAL) FROM
EMP WHERE DEPTNO=30);
```

	EMPNO	ENAME	JOB	MGR
	HIREDATE	SAL	COMM	DEPTNO
	7499	ALLEN	SALESMAN	7698 20-FEB-
81	1600	300	30	
	7566	JONES	MANAGER	7839 02-APR-
81	2975		20	
	7698	BLAKE	MANAGER	7839 01-MAY-
81	2850		30	
	7782	CLARK	MANAGER	7839 09-JUN-
81	2450		10	
	7788	SCOTT	ANALYST	7566 19-APR-
87	3000		20	
	7839	KING	PRESIDENT	17-NOV-
81	5000		10	
	7902	FORD	ANALYST	7566 03-DEC-
81	3000		20	

84. Display the number of employees who work for research dept and their salary is lesser than one of the salary in department in 10.

```
SELECT COUNT(*) FROM EMP WHERE DEPTNO IN(SELECT
DEPTNO FROM DEPT WHERE DNAME='RESEARCH') AND SAL<
ANY(SELECT SAL FROM EMP WHERE DEPTNO=10);
```

COUNT(*)

5

85. Display the dname that are having clerk in it.

SELECT DNAME FROM DEPT WHERE DEPTNO IN (SELECT
DEPTNO FROM EMP WHERE JOB='CLERK');

DNAME

ACCOUNTING
RESEARCH
SALES

86. Display the department names that are having atleast one L in it.

SELECT DNAME FROM DEPT WHERE DNAME LIKE '%L%';

DNAME

SALES

87. Display all the employees who are joined after BLAKE.

SELECT * FROM EMP WHERE HIREDATE > (SELECT
HIREDATE FROM EMP WHERE ENAME='BLAKE');

	EMPNO	ENAME	JOB	MGR
	HIREDATE	SAL	COMM	DEPTNO
	7654	MARTIN	SALESMAN	7698 28-SEP-
81	1250	1400	30	
	7782	CLARK	MANAGER	7839 09-JUN-
81	2450		10	
	7788	SCOTT	ANALYST	7566 19-APR-
87	3000		20	
	7839	KING	PRESIDENT	17-NOV-
81	5000		10	
	7844	TURNER	SALESMAN	7698 08-SEP-
81	1500	0	30	
	7876	ADAMS	CLERK	7788 23-MAY-
87	1100		20	

81	7900 JAMES	CLERK	7698 03-DEC-
	950	30	
	7902 FORD	ANALYST	7566 03-DEC-
81	3000	20	
	7934 MILLER	CLERK	7782 23-JAN-
82	1300	10	

88. List the dept name that are having at least 3 employees but not more than 5 employees in it.

```
SELECT DNAME FROM DEPT WHERE DEPTNO IN (SELECT
DEPTNO FROM EMP GROUP BY DEPTNO HAVING COUNT(*)
BETWEEN 3 AND 5);
```

DNAME

RESEARCH
ACCOUNTING

89. Display the location of all employees whose reporting manager salary is greater than 2000.

```
SELECT LOC FROM DEPT WHERE DEPTNO IN (SELECT
DEPTNO FROM EMP WHERE MGR IN (SELECT EMPNO FROM
EMP WHERE SAL >2000))
```

LOC

CHICAGO
DALLAS
NEW YORK

90. Select the employees whose dname is having at least two 'E' in it.

```
SELECT ENAME, DNAME FROM EMP, DEPT WHERE
EMP.DEPTNO = DEPT.DEPTNO AND DNAME LIKE '%E%E%'
```

ENAME DNAME

SMITH	RESEARCH
JONES	RESEARCH
SCOTT	RESEARCH
ADAMS	RESEARCH
FORD	RESEARCH

91.Display ename,sal of employees who are earning more than any of the analyst.

```
SELECT ENAME,SAL FROM EMP WHERE SAL>ANY(SELECT
SAL FROM EMP WHERE JOB='ANALYST');
```

ENAME	SAL
KING	5000

92. Select all the employees who are working for CHICAGO
 SELECT * FROM EMP WHERE DEPTNO IN(SELECT DEPTNO
 FROM DEPT WHERE LOC='CHICAGO');

EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	DEPTNO
7499	ALLEN	SALESMAN	7698 20-FEB-
81 1600	300	30	
7521	WARD	SALESMAN	7698 22-FEB-
81 1250	500	30	
7654	MARTIN	SALESMAN	7698 28-SEP-
81 1250	1400	30	
7698	BLAKE	MANAGER	7839 01-MAY-
81 2850		30	
7844	TURNER	SALESMAN	7698 08-SEP-
81 1500	0	30	
7900	JAMES	CLERK	7698 03-DEC-
81 950		30	

93. Query to display employee names who is having minimum salary in department research.

```
SELECT * FROM EMP WHERE SAL = ( SELECT MIN (SAL) FROM
EMP WHERE DEPTNO=(SELECT DEPTNO FROM DEPT
WHERE DNAME='RESEARCH'));
```

EMPNO	ENAME	JOB	MGR
HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902 17-DEC-
80 800		20	

94. List the department names that are having salesman.

```
SELECT DNAME FROM DEPT WHERE DEPTNO IN(SELECT  
DEPTNO FROM EMP WHERE JOB='SALESMAN');
```

DNAME

SALES

95. List the department names that are having at least 3 employees in it.

```
SELECT DNAME FROM DEPT WHERE DEPTNO IN (SELECT  
DEPTNO FROM EMP GROUP BY DEPTNO HAVING  
COUNT(*)>=3);
```

DNAME

SALES

RESEARCH

ACCOUNTING

96. List employees from research and accounting department having atleast two reporting.

```
SELECT ENAME FROM EMP WHERE DEPTNO IN(SELECT  
DEPTNO FROM DEPT WHERE DNAME  
IN('ACCOUNTING','RESEARCH')) AND  
EMPNO IN(SELECT MGR FROM EMP GROUP BY MGR HAVING  
COUNT(*)>=2)
```

ENAME

KING

JONES

97. Write a query to display employee name, job, dname, location of all employees who are working as manager and works at Chicago.

```
SELECT ENAME,JOB,LOC FROM EMP E,DEPT D WHERE
E.DEPTNO=D.DEPTNO AND JOB='MANAGER'AND
LOC='CHICAGO';
```

ENAME	JOB	LOC
BLAKE	MANAGER	CHICAGO

98. Select ename,dname of employee who earns 2nd max salary and works for location Dallas.

```
SELECT ENAME,DNAME FROM EMP E,DEPT D WHERE
E.DEPTNO=D.DEPTNO AND E.SAL IN(SELECT MAX(SAL) FROM
EMP WHERE SAL<(SELECT MAX(SAL) FROM EMP)
AND LOC='DALLAS')
```

ENAME	DNAME
SCOTT	RESEARCH
FORD	RESEARCH

99. Write a query to display the employee information who is not taking commission and joined company after July 83

```
SELECT * FROM EMP WHERE COMM IS NULL AND HIREDATE
> '31-JULY-83';
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7788	SCOTT	ANALYST	7566	19-APR-87	3000	20	
7876	ADAMS	CLERK	7788	23-MAY-87	1100	20	

100. List employees from sales and research department having atleast 2 reporting employees

```
SELECT ENAME FROM EMP WHERE DEPTNO IN(SELECT  
DEPTNO FROM DEPT WHERE DNAME IN('SALES','RESEARCH'))  
AND EMPNO IN(SELECT MGR FROM EMP GROUP BY MGR  
HAVING COUNT(*)>=2);
```

ENAME

BLAKE

JONES