QUESTIONS ON JOINS

1. LIST ENAME, JOB, ANNUAL SAL, DEPTNO, DNAME WHO EARN 30000 PER YEAR AND WHO ARE NOT CLERKS.

```
SQL> select ename,dname,job,sal*12 "Annual Salary"
```

- 2 from emp e inner join dept d
- 3 on e.deptno = d.deptno
- 4 where sal*12=30000 and job != 'clerk';

no rows selected

2. LIST OUT THE ALL EMPLOYEES BY NAME AND EMPLOYEE NUMBER ALONG WITH THEIR MANAGER'S NAME AND EMPLOYEE NUMBER.

SQL> select e.ename "Emp Name", e.empno "Emp No", m.ename "Mgr Name", m.empno "MGR No"

- 2 from emp e join emp m 3 on e.mgr = m.empno;

Emp Name	Emp No	Mgr Name	MGR No
SMITH	7369	FORD	7902
ALLEN	7499	Blake	7698
WARD	7521	BLAKE	7698
JONES	7566	King	7839
MARTIN	7654	BLAKE	7698
BLAKE	7698	King	7839
CLARK	7782	KING	7839
Scott	7788	JONES	7566
TURNER	7844	BLAKE	7698
Adams	7876	SCOTT	7788
JAMES	7900	BLAKE	7698
Ford	7902	JONES	7566
MILLER		CLARK	7782

13 rows selected.

3. DISPLAY ENAME, DNAME EVEN IF THERE NO EMPLOYEES WORKING IN A PARTICULAR DEPARTMENT.

ENAME	DNAME
SMITH	RESEARCH
ALLEN	SALES
WARD	SALES
JONES	RESEARCH
MARTIN	SALES
BLAKE	SALES
CLARK	ACCOUNT ING
SCOTT	RESEARCH
KING	ACCOUNT ING
TURNER	SALES
ADAMS	RESEARCH
JAMES	SALES
FORD	RESEARCH
MILLER	ACCOUNT I NG
	OPERATIONS
	sports
16 rows	selected.

4. DISPLAY THE DEPARTMENT NAME ALONG WITH TOTAL SALARY IN **EACH DEPARTMENT**.

- SQL> select dname,sum(sal)
 2 from emp e inner join dept d
 - 3 on e.deptno = d.deptno
 - 4 group by dname;

DNAME	SUM(SAL)
ACCOUNTING	8750
RESEARCH	10875
SALES	9400

5. DISPLAY EMPLOYEE NAME AND DEPARTMENT NAME FOR EACH EMPLOYEE.

SQL> select ename , dname

- 2 from emp e inner join dept d 3 on e.deptno = d.deptno;

ENAME	DNAME
SMITH	RESEARCH
ALLEN	SALES
WARD	SALES
JONES	RESEARCH
MARTIN	SALES
BLAKE	SALES
CLARK	ACCOUNTING
SCOTT	RESEARCH
KING	ACCOUNTING
TURNER	SALES
ADAMS	RESEARCH
JAMES	SALES
FORD	RESEARCH
MILLER	ACCOUNTING

6. DISPLAY LOCATION NAME OF THE EMPLOYEE WHO EARN COMMISSION.

SQL> select ename, loc

- 2 from emp e inner join dept d 3 on e.deptno = d.deptno
- 4 where comm is null;

ENAME	LOC
SMITH JONES BLAKE CLARK SCOTT KING ADAMS JAMES FORD	DALLAS DALLAS CHICAGO NEW YORK DALLAS NEW YORK DALLAS CHICAGO DALLAS
MILLER	NEW YORK

7. DISPLAY DEPT NAME OF THE EMPLOYEE WHO EARN MIN SALARY AND HAVE NO REPORTING MANAGER.

```
SQL> select dname , min(sal) "Minimum salary"
  2 from emp e inner join dept d
  3 on e.deptno = d.deptno
  4 where mgr is null
  5 group by dname;
DNAME Minimum salary
-----
                     5000
ACCOUNTING
8.DISPLAY DEPT NAME, LOC OF ALL THE EMPLOYEES WHO ARE
REPORTING TO SMITH.
SQL> select dname ,loc
  2 from emp e inner join dept d
3 on e.deptno = d.deptno
  4 where mgr = (select empno from emp where ename = 'SMITH');
no rows selected
9.LIST ALL THE DEPT NAME AND LOCATION OF ALL THE SALESMAN
MANAGER'S MANAGER.
SQL> select dname,loc
  2 from emp e inner join dept d
  3 on e.deptno = d.deptno
  4 where empno =(select mgr from emp where empno
  5 = (select distinct mgr from emp where job ='SALESMAN'));
DNAME LOC
ACCOUNTING NEW YORK
```

10. LIST EMPLOYEES WHO ARE WORKING IN RESEARCH DEPT AND THEY ARE MANAGER.

SOL> select ename

- from emp e inner join dept d
- on e.deptno = d.deptno
- 4 where e.deptno = (select deptno from dept where dname='RESEARCH') and
- empno in (select empno from emp where job= 'MANAGER');

ENAME

JONES

11. DISPLAY THE NUMBER OF EMPLOYEES WHO ARE GETTING SALARY LESS THAN THE BLAKE'S MANAGER.

SQL> select * from emp

- 2 where sal < (select sal from emp where empno =
- 3 (select mgr from emp where ename = 'BLAKE'));

EMPN0	ENAME	J0B	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
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	9	30
7876	ADAMS	CLERK	7788	23-MAY-87	1100		20
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

12. LIST THE EMPLOYEE DEPTNAME AND LOCATION OF ALL THE EMPLOYEES WHO ARE ANALYST, REPORTING TO BLAKE.

SQL> select dname ,loc

- 2 from emp e inner join dept d
- 3 on e.deptno = d.deptno
- 4 where empno =(select distinct mgr from emp where job ='ANALYST') and ename ='BLAKE';

no rows selected

13. DISPLAY THE EMPLOYEE NAMES, HIREDATE, COMM OF FORD'S MANAGER.

SQL> select ename, comm, hiredate from emp

2 where empno = (select mgr from emp where ename = 'FORD');

ENAME COMM HIREDATE JONES 02-APR-81

14. DISPLAY ENAME, DNAME OF ALL THE EMPLOYEES WHOSE SALARY LESS THAN AVG SAL OF DEPT 30.

SQL> select ename , dname from emp e inner join dept d

2 on e.deptno = d.deptno

RUAUE

3 where sal < (select avq(sal) from emp where deptno =30);</pre>

ENAME	DNAME
SMITH	RESEARCH
WARD	SALES
MARTIN	SALES
TURNER	SALES
ADAMS	RESEARCH
JAMES	SALES
MILLER	ACCOUNTING

FUAUE

15. DISPLAY ENAME DNAME AND LOC OF ALL THE EMPLOYEES WHO ARE WORKING FOR JONES.

SQL> select ename ,dname ,loc from emp e inner join dept d

- 2 on e.deptno = d.deptno
- 3 where empno in (select empno from emp where mgr = (select empno from emp where ename='JONES'));

ENAME	DNAME	LOC
SCOTT	RESEARCH	DALLAS
FORD	RESEARCH	DALLAS

16 .	DISPLAY	ENAME	DNAME	OF ALL	THE	EMPL	OYEES	WHOSE	NAME
ST	ARTS WIT	HS.							

SQL> select ename,dname from emp e inner join dept d

- 2 on e.deptno = d.deptno
- 3 where ename like 'S%';

ENAME	DNAME
SMITH	RESEARCH
SCOTT	RESEARCH

.....

17. LIST THE DNAME WHO ARE NOT HAVING ANY EMPLOYEE IN IT.

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

DNAME

sports OPERATIONS

.....

18. DISPLAY EMPLOYEE WHO ARE GETTING SAME COMMISSION.

```
SQL> select x.ename from emp x join emp y
```

2 on x.comm = y.comm and x.empno !=y.empno;

no rows selected

19. DISPLAY ALL THE DEPT NAMES IRRESPECTIVE OF ANY EMPLOYEE WORKING IN IT OR NOT. IF AN EMPLOYEE IS WORKING DISPLAY HIS NAME.

```
SQL> select ename ,dname from emp e left join dept d
2  on e.deptno = d.deptno
3  union
4  select ename ,dname from emp e right join dept d
5  on e.deptno = d.deptno ;
```

ENAME	DNAME
ADAMS ALLEN BLAKE CLARK FORD JAMES JONES KING MARTIN MILLER SCOTT SMITH TURNER WARD	RESEARCH SALES SALES ACCOUNTING RESEARCH SALES RESEARCH ACCOUNTING SALES ACCOUNTING RESEARCH RESEARCH RESEARCH SALES ACCOUNTING RESEARCH SALES SALES OPERATIONS
	sports

20. WRITE A QUERY TO DISPLAY EMPLOYEE NAME, JOB, DNAME, LOCATION OF ALL EMPLOYEES WHO ARE WORKING AS ACTUAL MANAGERS AND WORKS AT CHICAGO.

```
SQL> select ename , job, dname,loc from emp e inner join dept d
2 on e.deptno = d.deptno
3 where job = 'MANAGER' and loc = 'CHICAGO';
```

ENAME	J0B	DNAME	LOC
BLAKE	MANAGER	SALES	CHICAGO

21. LIST THE DEPARTMENT NAMES IN WHICH THE EMPLOYEES ARE HIRED BETWEEN 1ST OF JAN 1981 AND 31ST DEC 1982 WITH SALARY MORE THAN 1800.

SQL> select dname from emp e inner join dept d

- 2 on e.deptno = d.deptno
- 3 where hiredate between '01-JAN-81' and '31-DEC-82' and sal>1800;

DNAME

RESEARCH SALES ACCOUNTING ACCOUNTING RESEARCH

22. DISPLAY 2ND LEAST SALARY FROM EMPLOYEE TABLE.

SQL> select * from emp x

- 2 where 2=(select count(distinct y.sal) from emp y
- 3 where y.sal<=x.sal);</pre>

EMPN0	ENAME	J0B	MGR	HIREDATE	SAL	COMM	DEPTNO
7900	JAMES	CLERK	7698	03-DEC-81	950		30

23. LIST THE EMPLOYEES WHOSE ANNUAL SALARY IS GREATER THAN 1500 AND WHO ARE JOINED BEFORE 1982 ONLY.

SQL> select * from emp

where sal*12>1500 and hiredate<'01-JAN-82';</p>

EMPN0	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	HTIMS	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
7839	KING	PRESIDENT		17-NOV-81	5000		10
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	9	30
7900	JAMES	CLERK	7698	03-DEC-81	950		30
7902	FORD	ANALYST	7566	03-DEC-81	3000		20

25. DISPLAY EMPLOYEE NAME ALONG WITH THEIR MANAGER NAME.

```
SQL> select e.ename "Emp name",m.ename "Mgr name"
2  from emp e join emp m
3  on e.mqr = m.empno;
```

Emp name	Mgr name
SMITH	FORD
ALLEN	BLAKE
WARD	BLAKE
JONES	KING
MARTIN	BLAKE
BLAKE	KING
CLARK	KING
SCOTT	JONES
TURNER	BLAKE
ADAMS	SCOTT
JAMES	BLAKE
FORD	JONES
MILLER	CLARK

26. DISPLAY EMPLOYEE NAME AND HIS DEPT NAME FOR THE EMPLOYEES WHOSE NAME STARTS WITH 'S'.

```
SQL> select ename,dname from emp e inner join dept d
2 on e.deptno = d.deptno
3 where ename like 'S%';
```

ENAME	DNAME
SMITH	RESEARCH
SCOTT	RESEARCH

.....

27. DISPLAY EMPLOYEES WHO ARE GETTING SAME SALARY.

```
SQL> select x.ename from emp x join emp y 2 on x.sal = y.sal
```

3 where x.empno !=y.empno;

ENAME

MARTIN

WARD

WHILL

FORD

SCOTT

......

WHOLE EMP AND DEPT TABLE:

SQL> SELECT * FROM EMP;

EMPN0	ENAME	J0B	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
7876	ADAMS	CLERK	7788	23-MAY-87	1100		20
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

14 rows selected.

SQL> SELECT * FROM DEPT;

DEPTNO	DNAME	LOC
69	sports	chennai
10	ACCOUNTING	NEW YORK
20	RESEARCH	DALLAS
30	SALES	CHICAGO
40	OPERATIONS	BOSTON