## QUESTIONS ON OPERATORS:

### 1) LIST ALL THE EMPLOYEES WHOSE COMMISSION IS NULL.

```
SQL> select * from emp
  2  where comm is null;

    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
     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
     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
```

----------------------------------------------------------------------------

### 2) LIST ALL THE EMPLOYEES WHO DON'T HAVE A REPORTING MANAGER.

```
SQL> select * from emp
  2  where mgr is null;

    EMPNO ENAME      JOB           MGR HIREDATE        SAL       COMM     DEPTNO
---------- ---------- --------- ---------- --------- ---------- ---------- ----------
     7839 KING       PRESIDENT         17-NOV-81      5000                    10
```

----------------------------------------------------------------------------

### 3) LIST ALL THE SALESMEN IN DEPT 30.

```
SQL> select * from emp
  2  where job = 'SALESMAN' and deptno= 30;

    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
```

----------------------------------------------------------------------------

### 4) LIST ALL THE SALESMEN IN DEPT NUMBER 30 AND HAVING SALARY GREATER THAN 1500 .

```
SQL> select * from emp
  2  where job = 'SALESMAN' and deptno= 30 and sal >1500;

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

----------------------------------------------------------------------------

## 5) LIST ALL THE EMPLOYEES WHOSE NAME STARTS WITH 'S' OR 'A' .

```
SQL> select ename from emp
  2  where ename like 'S%' or ename like 'A%';

ENAME
----------
SMITH
ALLEN
SCOTT
ADAMS
```

-------------------------------------------------------------------------------

## 6) LIST ALL THE EMPLOYEES EXCEPT THOSE WHO ARE WORKING IN DEPT 10 & 20.

```
SQL> select * from emp
  2  where deptno not in (10,20);

     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
```

-------------------------------------------------------------------------------

## 7) LIST THE EMPLOYEES WHOSE NAME DOES NOT START WITH 'S'.

```
SQL> select ename from emp
  2  where ename not like 'S%';

ENAME
----------
ALLEN
WARD
JONES
MARTIN
BLAKE
CLARK
KING
TURNER
ADAMS
JAMES
FORD
MILLER
```

-------------------------------------------------------------------------------

## 8) LIST ALL THE EMPLOYEES WHO ARE HAVING REPORTING MANAGERS IN DEPT 10 .

```
SQL> select * from emp
  2  where mgr is not null and deptno = 10;

    EMPNO ENAME      JOB              MGR HIREDATE         SAL       COMM     DEPTNO
---------- ---------- ---------- ---------- --------- ---------- ---------- ----------
      7782 CLARK      MANAGER         7839 09-JUN-81      2450                     10
      7934 MILLER     CLERK           7782 23-JAN-82      1300                     10
```

----------------------------------------------------------------------------------------

## 9) LIST ALL THE EMPLOYEES WHOSE COMMISSION IS NULL AND WORKING AS CLERK.

```
SQL> select * from emp
  2  where comm is null and job = 'CLERK';

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

----------------------------------------------------------------------------------------

## 10) LIST ALL THE EMPLOYEES WHO DON'T HAVE A REPORTING MANAGER IN DEPTNO 10 OR 30.

```
SQL> select * from emp
  2  where mgr is null and deptno in (10,30);

    EMPNO ENAME      JOB              MGR HIREDATE         SAL       COMM     DEPTNO
---------- ---------- ---------- ---------- --------- ---------- ---------- ----------
      7839 KING       PRESIDENT            17-NOV-81      5000                     10
```

----------------------------------------------------------------------------------------

## 11) LIST ALL THE SALESMEN IN DEPT 30 WITH SAL MORE THAN 2450.

```
SQL> select * from emp
  2   where deptno = 30 and job = 'SALESMEN' and sal > 2450;

no rows selected
```

----------------------------------------------------------------------------------------

## 12) LIST ALL THE ANALYST IN DEPT NUMBER 20 AND HAVING SALARY GREATER THAN 2500.

```
SQL> select * from emp
  2  where job = 'ANALYST'and deptno = 20 and sal > 2500;

    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
```

----------------------------------------------------------------------------------------

## 13) LIST ALL THE EMPLOYEES WHOSE NAME STARTS WITH 'M' OR 'J' .

```
SQL> select ename from emp
  2   where ename like 'M%' or ename like 'J%';

ENAME
----------
JONES
MARTIN
JAMES
MILLER
```

---------------------------------------------------------------------------------------

## 14)LIST ALL THE EMPLOYEES WITH ANNUAL SALARY EXCEPT THOSE WHO ARE WORKING IN DEPT 30

```
SQL> select ename , sal*12 "Annual Salary" ,deptno from emp
  2   where deptno <> 30;

ENAME      Annual Salary     DEPTNO
---------- ------------- ----------
SMITH               9600         20
JONES              35700         20
CLARK              29400         10
SCOTT              36000         20
KING               60000         10
ADAMS              13200         20
FORD               36000         20
MILLER             15600         10
```

---------------------------------------------------------------------------------------

## 15) LIST THE EMPLOYEES WHOSE NAME DOES NOT END WITH 'ES' OR 'R'.

```
SQL> select ename from emp
  2   where ename not like '%ES' and ename not like '%R';

ENAME
----------
SMITH
ALLEN
WARD
MARTIN
BLAKE
CLARK
SCOTT
KING
ADAMS
FORD

10 rows selected.
```

---------------------------------------------------------------------------------------

## 16) LIST ALL THE EMPLOYEES WHO ARE HAVING REPORTING MANAGERS IN DEPT 10 ALONG WITH 10% HIKE IN SALARY.

```
SQL> select ename, mgr,(sal+(sal*0.1)) "Salary with hike", deptno from emp
  2   where mgr is not null and deptno = 10;

ENAME           MGR Salary with hike     DEPTNO
---------- ---------- ---------------- ----------
CLARK          7839             2695         10
MILLER         7782             1430         10
```

---------------------------------------------------------------------

## 17) DISPLAY ALL THE EMPLOYEE WHO ARE 'SALESMAN'S HAVING 'E' AS THE LAST BUT ONE CHARACTER IN ENAME BUT SALARY HAVING EXACTLY 4 CHARACTER.

```
SQL> select * from emp
  2    where ename like '%E' and job = 'SALESMAN' and sal like '____';

no rows selected
```

---------------------------------------------------------------------

## 18) DISPLAY ALL THE EMPLOYEE WHO ARE JOINED AFTER YEAR 81 .

```
SQL> select * from emp
  2   where hiredate >'31-DEC-81';

     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
      7934 MILLER     CLERK          7782 23-JAN-82      1300                    10
```

---------------------------------------------------------------------

## 19) DISPLAY ALL THE EMPLOYEE WHO ARE JOINED IN FEB .

```
SQL> select * from emp
  2   where hiredate like '%FEB%';

     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
```

---------------------------------------------------------------------

## 20) LIST THE EMPLOYEES WHO ARE NOT WORKING AS MANAGERS AND CLERKS IN DEPT 10 AND 20 WITH A SALARY IN THE RANGE OF 1000 TO 3000.

```
SQL> select * from emp
  2   where job not in ('MANAGER','CLERK') and deptno in(10,20) and sal between 1000 and 3000;

     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
```

---------------------------------------------------------------------

## 21) LIST THE EMPLOYEES WHOSE SALARY NOT IN THE RANGE OF 1000 TO 2000 AND WORKING IN DEPT 10,20 OR 30 EXCEPT ALL SALESMEN.

```
SQL> select * from emp
  2  where sal not between 1000 and 2000 and deptno in (10,20,30) and job <> 'SALESMAN';

    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
      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
      7900 JAMES      CLERK           7698 03-DEC-81        950                   30
      7902 FORD       ANALYST         7566 03-DEC-81       3000                   20
```

---------------------------------------------------------------------------------------------

## 22) LIST THE DEPARTMENT NAMES WHICH ARE HAVING LETTER 'O' IN THEIR LOCATIONS AS WELL AS THEIR DEPARTMENT NAMES .

```
SQL> select * from dept
  2  where dname like '%O%' and loc like '%O%';

    DEPTNO DNAME          LOC
---------- -------------- -------------
        10 ACCOUNTING     NEW YORK
        40 OPERATIONS     BOSTON
```

---------------------------------------------------------------------------------------------

## 23) DISPLAY ALL THE EMPLOYEES WHOSE JOB HAS STRING 'MAN' IN IT.

```
SQL> select * from emp
  2  where job like 'MAN%';

    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
```

---------------------------------------------------------------------------------------------

## 24)LIST THE EMPLOYEES WHO ARE HIRED AFTER 82 AND BEFORE 87.

```
SQL> select * from emp
  2  where hiredate between '01-JAN-83' and '31-DEC-86';

no rows selected
```

---------------------------------------------------------------------------------------------

## 25)WAQTD ALL THE DETAILS OF EMPLOYEES HIRED IN NOVEMBER AND DECEMBER.

```
SQL> select * from emp
  2  where hiredate like '%NOV%' or hiredate like '%DEC%';

     EMPNO ENAME      JOB              MGR HIREDATE        SAL       COMM     DEPTNO
---------- ---------- ---------- ---------- --------- ---------- ---------- ----------
      7369 SMITH      CLERK           7902 17-DEC-80        800                    20
      7839 KING       PRESIDENT            17-NOV-81       5000                    10
      7900 JAMES      CLERK           7698 03-DEC-81        950                    30
      7902 FORD       ANALYST         7566 03-DEC-81       3000                    20
```

-------------------------------------------------------------------------------------

## 26)LIST ALL THE EMPLOYEE NAMES AND COMMISSION FOR THOSE EMPLOYEES WHO EARN COMMISSION MORE THAN THEIR SALARY.

```
SQL> select ename ,comm from emp
  2  where comm > sal;

ENAME            COMM
---------- ----------
MARTIN           1400
```

-------------------------------------------------------------------------------------

## 27)WAQTD NAME AND DESIGNATION FOR ALL THE EMPLOYEES HAVING REPORTING MANAGERS AND ALSO THEIR NAMES STARTING WITH 'S'.

```
SQL> select ename , job from emp
  2  where mgr is not null and ename like 'S%';

ENAME      JOB
---------- ---------
SMITH      CLERK
SCOTT      ANALYST
```

-------------------------------------------------------------------------------------

**28)WAQTD NAME AND SALARY OF ALL THE EMPLOYEES IF THEIR ANNUAL SALARY ENDS WITH '0' .**

```
SQL> select ename , sal from emp
  2   where (sal*12) like '%0';
```

```
ENAME           SAL
---------- ----------
SMITH           800
ALLEN          1600
WARD           1250
JONES          2975
MARTIN         1250
BLAKE          2850
CLARK          2450
SCOTT          3000
KING           5000
TURNER         1500
ADAMS          1100
JAMES           950
FORD           3000
MILLER         1300
```

----------------------------------------------------------------------------------

**29)WAQTD NAME OF THE EMPLOYEE HAVING AT LEAST 2 L's IN HIS NAME**

```
SQL> select ename from emp
  2   where ename like '%L%L%';
```

```
ENAME
----------
ALLEN
MILLER
```

----------------------------------------------------------------------------------

**30)WAQTD NAME OF THE EMPLOYEES WHOSE NAME STARTS WITH A 'VOWEL'.**

```
SQL> select ename from emp
  2   where ename like 'A%' or ename like 'E%' or ename like 'I%'
  3   or ename like 'O%' or ename like 'U%';
```

```
ENAME
----------
ALLEN
ADAMS
```

----------------------------------------------------------------------------------

## WHOLE EMP TABLE FOR REFERENCE:

```
SQL> SELECT * 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
      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.
```