

PROJECTION: QUESTIONS ON EMP AND DEPT TABLE:

1.WRIT A QUERY TO DISPLAY ALL THE DETAILS FROM THE EMPLOYEE TABLE.

```
SELECT *  
FROM EMP;
```

2.WAQT NAMES OF ALL THE EMPLOYEES.

```
SELECT ENAME  
FROM EMP;
```

3.WAQT NAME AND SALARY GIVEN TO ALL THE EMPLOYEES.

```
SELECT ENAME, SAL  
FROM EMP;
```

4.WAQT NAME AND COMMISSION GIVEN TO ALL THE EMPLOYEES.

```
SELECT ENAME, COMM  
FROM EMP;
```

5.WAQT EMPLOYEE ID AND DEPARTMENT NUMBER OF ALL THE EMPLOYEES IN EMP TABLE.

```
SELECT EMPNO, DEPTNO  
FROM EMP;
```

6.WAQT ENAME AND HIREDATE OF ALL THE EMPLOYEES .

```
SELECT ENAME, HIREDATE  
FROM EMP;
```

7.WAQTD NAME AND DESIGNATION OF ALL THE EMPLOYEES

```
SELECT ENAME, JOB  
FROM EMP;
```

8.WAQTD NAME , JOB AND SALARY GIVEN ALL THE EMPLOYEES.

```
SELECT ENAME, JOB, SAL  
FROM EMP;
```

9.WAQTD DNAME PRESENT IN DEPARTMENT TABLE.

```
SELECT DNAME  
FROM DEPT;
```

10.WAQTD DNAME AND LOCATION PRESENT IN DEPT TABLE.

```
SELECT DNAME, LOC  
FROM DEPT;
```

PROJECTION: ASSIGNMENT ON EXPRESSION & ALIAS

1.WAQTD NAME OF THE EMPLOYEE ALONG WITH THEIR ANNUAL SALARY.

SELECT ENAME, SAL* ANNUALSAL

FROM EMP;

2.WAQTD ENAME AND JOB FOR ALL THE EMPLOYEE WITH THEIR HALF TERM SALARY.

SELECT ENAME , JOB , SAL*6 HALF_TERM_SALARY

FROM EMP ;

3.WAQTD ALL THE DETAILS OF THE EMPLOYEES ALONG WITH AN ANNUALBONUS OF 2000.

SELECT EMP.* , SAL*12+2000 BONUS

FROM EMP ;

4.WAQTD NAME SALARY AND SALARY WITH A HIKE OF 10%.

SELECT ENAME , SAL+ SAL*10/100 HIKE

FROM EMP ;

5.WAQTD NAME AND SALARY WITH DEDUCTION OF 25%.

SELECT ENAME , SAL- SAL*25/100 DEDUCTION FROM

EMP ;

6.WAQTD NAME AND SALARY WITH MONTHLY HIKE OF 50.

SELECT ENAME , SAL+ 50 HIKE

FROM EMP ;

7.WAQTD NAME AND ANNUAL SALARY WITH DEDUCTION OF 10%.

```
SELECT ENAME , SAL*12- SAL*12*10/100 DEDUCTION  
FROM EMP ;
```

8.WAQTD TOTAL SALARY GIVEN TO EACH EMPLOYEE (SAL+COMM).

```
SELECT SAL+COMM TOTAL_SALARY  
FROM EMP ;
```

9.WAQTD DETAILS OF ALL THE EMPLOYEES ALONG WITH ANNUAL SALARY.

```
SELECT EMP.* , SAL*12 ANNUAL_SALARY FROM  
EMP ;
```

10.WAQTD NAME AND DESIGNATION ALONG WITH 100 PENALTY IN SALARY.

```
SELECT ENAME , JOB , SAL-100 PENALTY FROM  
EMP ;
```

SELECTION: ASSIGNMENT ON WHERE CLAUSE.

1.WAQTD THE ANNUAL SALARY OF THE EMPLOYEE WHOSE NAME IS SMITH

```
SELECT SAL*12  
FROM EMP  
WHERE ENAME ='SMITH' ;
```

2.WAQTD NAME OF THE EMPLOYEES WORKING AS CLERK

```
SELECT ENAME  
FROM EMP  
WHERE JOB ='CLERK' ;
```

3.WAQTD SALARY OF THE EMPLOYEES WHO ARE WORKING AS SALESMAN

```
SELECT SAL  
FROM EMP  
WHERE JOB ='SALESMAN' ;
```

4.WAQTD DETAILS OF THE EMP WHO EARNS MORE THAN 2000

```
SELECT *  
FROM EMP  
WHERE SAL > 2000 ;
```

5.WAQTD DETAILS OF THE EMP WHOS NAME IS JONES

```
SELECT *  
FROM EMP  
WHERE ENAME ='JONES' ;
```

6.WAQTD DETAILS OF THE EMP WHO WAS HIRED AFTER 01-JAN-81

```
SELECT *  
FROM EMP  
WHERE HIREDATE > '01-JAN-81' ;
```

7.WAQTD NAME AND SAL ALONG WITH HIS ANNUAL SALARY
IF THE ANNUAL SALARY IS MORE THAN 12000

```
SELECT ENAME , SAL , SAL * 12  
FROM EMP  
WHERE SAL *12 > 12000 ;
```

8.WAQTD EMPNO OF THE EMPLOYEES WHO ARE WORKING IN
DEPT 30

```
SELECT EMPNO  
FROM EMP  
WHERE DEPTNO = 30 ;
```

9.WAQTD ENAME AND HIREDATE IF THEY ARE HIRED BEFORE
1981

```
SELECT ENAME , HIREDATE  
FROM EMP  
WHERE HIREDATE < '01-JAN-1981' ;
```

10.WAQTD DETAILS OF THE EMPLOYEES WORKING AS
MANAGER

```
SELECT *  
FROM EMP  
WHERE JOB ='MANAGER';
```

11.WAQTD NAME AND SALARY GIVEN TO AN EMPLOYEE IF
EMPLOYEE EARNS A COMMISSION OF RUPEES 1400

```
SELECT ENAME , SAL
```

```
FROM EMP  
WHERE COMM = 1400 ;
```

12.WAQTD EMPNO OF EMPLOYEES HIRED BEFORE THE YEAR
87

```
SELECT EMPNO , HIREDATE  
FROM EMP  
WHERE HIREDATE < '01-JAN-1987' ;
```

13.WAQTD DETAILS OF EMPLOYEES WORKING AS AN N
ANALYST

```
SELECT *  
FROM EMP  
WHERE JOB ='ANALYST' ;
```

14.WAQTD DETAILS OF EMPS EARNING MORE THAN 2000
RUPEES PER MONTH

```
SELECT *  
FROM EMP  
WHERE SAL > 2000 ;
```

ASSIGNMENT ON LOGICAL OPERATORS:

1.WAQTD DETAILS OF THE EMPLOYEES WORKING AS CLERK AND EARNING LESS THAN 1500

```
SELECT *  
FROM EMP  
WHERE JOB ='CLERK' AND SAL < 1500 ;
```

2.WAQTD NAME AND HIREDATE OF THE EMPLOYEES WORKING AS MANAGER IN DEPT 30

```
SELECT ENAME , HIREDATE  
FROM EMP  
WHERE JOB ='MANAGER' AND DEPTNO=30 ;
```

3.WAQTD DETAILS OF THE EMP ALONG WITH ANNUAL SALARY IF THEY ARE WORKING IN DEPT 30 AS SALESMAN AND THEIR ANNUAL SALARY HAS TO BE GREATER THAN 14000

```
SELECT EMP.* , SAL*12 ANNUAL_SALARY  
FROM EMP  
WHERE DEPTNO = 30 AND JOB ='SALESMAN' AND SAL*12 > 14000 ;
```

4.WAQTD ALL THE DETAILS OF THE EMP WORKING IN DEPT 30 OR AS ANALYST

```
SELECT *  
FROM EMP  
WHERE DEPTNO = 30 OR JOB ='ANALYST' ;
```

5.WAQTD NAMES OF THE EMPLOYEES WHOSE SALARY IS LESS THAN 1100 AND THEIR DESIGNATION IS CLERK

**SELECT ENAME
FROM EMP
WHERE SAL < 1100 AND JOB = 'CLERK' ;**

6. WAQTD NAME AND SAL, ANNUAL SAL AND DEPTNO IF DEPTNO IS 20
EARNING MORE THAN 1100 AND ANNUAL SALARY EXCEEDS 12000

**SELECT ENAME, SAL, SAL*12, DEPTNO
FROM EMP
WHERE DEPTNO = 20 AND SAL > 1100 AND SAL*12 > 12000 ;**

7. WAQTD EMPNO AND NAMES OF THE EMPLOYEES WORKING AS
MANAGER IN DEPT 20

**SELECT EMPNO, ENAME
FROM EMP
WHERE DEPTNO = 20 AND JOB = 'MANAGER' ;**

8. WAQTD DETAILS OF EMPLOYEES WORKING IN DEPT 20 OR 30

**SELECT *
FROM EMP
WHERE DEPTNO = 10 OR DEPTNO = 30 ;**

9. WAQTD DETAILS OF EMPLOYEES WORKING AS ANALYST IN DEPT 10

**SELECT *
FROM EMP
WHERE DEPTNO = 10 AND JOB = 'ANALYST' ;**

10. WAQTD DETAILS OF EMPLOYEE WORKING AS PRESIDENT WITH
SALARY OF RUPEES 4000

SELECT *
FROM EMP
WHERE SAL=4000 AND JOB ='PRESIDENT' ;

11. WAQTD NAMES AND DEPTNO , JOB OF EMPS WORKING AS CLERK IN
DEPT 10 OR 20

SELECT ENAME, DEPTNO, JOB
FROM EMP
WHERE JOB = 'CLERK' AND (DEPTNO =10 OR DEPTNO =20);

12. WAQTD DETAILS OF EMPLOYEES WORKING AS CLERK OR MANAGER
IN DEPT 10

SELECT *
FROM EMP
WHERE (JOB = 'CLERK' OR JOB = 'MANAGER') AND DEPTNO = 10;

13. WAQTD NAMES OF EMPLOYEES WORKING IN DEPT 10 ,20 , 30 , 40

SELECT ENAME
FROM EMP
WHERE DEPTNO = 10 OR DEPTNO = 20 OR DEPTNO = 30 OR
DEPTNO =40 ;

14. WAQTD DETAILS OF EMPLOYEES WITH EMPNO 7902, 7839

SELECT *
FROM EMP
WHERE EMPNO = 7902 OR EMPNO = 7839;

15. WAQTD DETAILS OF EMPLOYEES WORKING AS MANAGER OR
SALESMAN OR CLERK

```
SELECT *  
FROM EMP  
WHERE JOB = 'MANAGER' OR JOB = 'SALESMAN' OR JOB = 'CLERK';
```

16.WAQTD NAMES OF EMPLOYEES HIRED AFTER 81 AND BEFORE 87

```
SELECT ENAME  
FROM EMP  
WHERE HIREDATE > '31-DEC-81' AND HIREDATE <'01-JAN-87';
```

17.WAQTD DETAILS OF EMPLOYEES EARNING MORE THAN 1250 BUT LESS THAN 3000

```
SELECT *  
FROM EMP  
WHERE SAL > 1250 AND SAL < 3000 ;
```

18.WAQTD NAMES OF EMPLOYEES HIRED AFTER 81 INTO DEPT 10 OR 30

```
SELECT ENAME  
FROM EMP  
WHERE HIREDATE > '31-DEC-81' AND ( DEPTNO = 10 OR DEPTNO= 20 )  
;
```

19.WAQTD NAMES OF EMPLOYEES ALONG WITH ANNUAL SALARY FOR THE EMPLOYEES WORKING AS MANAGER OR CLERK INTO DEPT 10 OR 30

```
SELECT ENAME , SAL*12  
FROM EMP  
WHERE ( JOB = 'MANAGER' OR JOB ='CLERK') AND ( DEPTNO = 10 OR  
DEPTNO = 30 ) ;
```

20.WAQTD ALL THE DETAILS ALONG WITH ANNUAL SALARY IF SAL IS BETWEEN 1000 AND 4000 ANNUAL SALARY MORE THAN 15000

SELECT EMP.* , SAL*12

FROM EMP

WHERE SAL > 1000 AND SAL < 4000 AND SAL*12 > 15000 ;

ASSIGNMENT ON SPECIAL OPERATORS:

- 1) LIST ALL THE EMPLOYEES WHOSE COMMISSION IS NULL

```
SELECT ENAME  
FROM EMP  
WHERE COMM IS NULL;
```

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

```
SELECT ENAME  
FROM EMP  
WHERE MGR IS NULL;
```

- 3) LIST ALL THE SALESMEN IN DEPT 30

```
SELECT ENAME  
FROM EMP  
WHERE JOB IN ('SALESMAN') AND DEPTNO IN (30);
```

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

```
SELECT ENAME  
FROM EMP  
WHERE JOB IN ('SALESMAN') AND DEPTNO IN (30) AND SAL >1500;
```

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

```
SELECT ENAME  
FROM EMP  
WHERE ENAME LIKE '%S%' OR ENAME LIKE '%A%';
```

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

```
SELECT ENAME  
FROM EMP  
WHERE DEPTNO NOT IN(10,20);
```

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

```
SELECT ENAME  
FROM EMP  
WHERE ENAME NOT LIKE '%S%';
```

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

```
SELECT ENAME  
FROM EMP  
WHERE MGR IS NOT NULL AND DEPTNO IN 10;
```

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

```
SELECT ENAME  
FROM EMP  
WHERE COMM IS NULL AND JOB IN 'CLERK';
```

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

```
SELECT ENAME  
FROM EMP  
WHERE MGR IS NULL AND DEPTNO IN(10,30);
```

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

**SELECT ENAME
FROM EMP
WHERE JOB IN 'SALESMAN' AND DEPTNO IN 30 AND SAL >2450;**

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

**SELECT ENAME
FROM EMP
WHERE JOB IN 'ANALYST' AND DEPTNO IN 20 AND SAL>2500;**

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

**SELECT ENAME
FROM EMP
WHERE ENAME LIKE 'M%' OR ENAME LIKE 'J%';**

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

**SELECT ENAME, SAL*12
FROM EMP
WHERE DEPTNO NOT IN 30;**

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

**SELECT ENAME
FROM EMP
WHERE ENAME NOT LIKE '%ES' OR ENAME NOT LIKE '%R';**

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

**SELECT ENAME, SAL+SAL*10/100
FROM EMP**

WHERE MGR IS NOT NULL AND DEPTNO IN 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

**SELECT ENAME
FROM EMP
WHERE JOB IN 'SALESMAN' AND ENAME LIKE '%E_' AND SAL LIKE '____';**

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

**SELECT ENAME
FROM EMP
WHERE HIREDATE >'31-DEC-81';**

19) DISPLAY ALL THE EMPLOYEE WHO ARE JOINED IN FEB

**SELECT ENAME
FROM EMP
WHERE HIREDATE LIKE '%FEB%';**

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

**SELECT ENAME
FROM EMP
WHERE JOB NOT IN ('MANAGER', 'CLERK') AND DEPTNO IN (10,20)
AND SAL BETWEEN 1000 AND 3000;**

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

```
SELECT ENAME  
FROM EMP  
WHERE (SAL NOT BETWEEN 1000 AND 2000) AND DEPTNO IN (10,  
20, 30) AND JOB NOT IN 'SALESMAN';
```

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

```
SELECT DNAME  
FROM DEPT  
WHERE DNAME LIKE '%O%' AND LOC LIKE '%O%';
```

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

```
SELECT ENAME  
FROM EMP  
WHERE JOB LIKE '%MAN%';
```

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

```
SELECT ENAME  
FROM EMP  
WHERE HIREDATE BETWEEN '01-JAN-83' AND '31-DEC-86';
```

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

SELECT *
FROM EMP
WHERE HIREDATE LIKE '%NOV%' OR HIREDATE LIKE '%DEC%';

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

SELECT ENAME, COMM
FROM EMP
WHERE COMM>SAL;

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

SELECT ENAME, JOB
FROM EMP
WHERE MGR IS NOT NULL AND ENAME LIKE 'S%';

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

SELECT ENAME, SAL
FROM EMP
WHERE SAL*12 LIKE '%0';

29)WAQTD NAME OF THE EMPLOYEE HAVING ATLEAST 2L's IN HIS NAME .

SELECT ENAME
FROM EMP
WHERE ENAME LIKE '%L%L%';

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

SELECT ENAME

FROM EMP

**WHERE ENAME LIKE 'A%' OR ENAME LIKE 'E%' OR ENAME LIKE 'I%' OR
ENAME LIKE 'O%' OR ENAME LIKE 'U%';**

ASSIGNEMENT ON MRF()

1.WAQTD NUMBER OF EMPLOYEES GETTING SALARY LESS THAN 2000 IN DEPTNO 10

```
SELECT COUNT(*)  
FROM EMP  
WHERE DEPTNO = 10 AND SAL < 2000 ;
```

2.WAQTD TOTAL SALARY NEEDED TO PAY EMPLOYEES WORKING AS CLERK

```
SELECT SUM(SAL)  
FROM EMP  
WHERE JOB ='CLERK';
```

3.WAQTD AVERAGE SALARY NEEDED TO PAY ALL EMPLOYEES

```
SELECT AVG(SAL)  
FROM EMP ;
```

4.WAQTD NUMBER OF EMPLOYEES HAVING 'A' AS THEIR FIRST CHARACTER

```
SELECT COUNT(*)  
FROM EMP  
WHERE ENAME LIKE 'A%';
```

5.WAQTD NUMBER OF EMPLOYEES WORKING AS CLERK OR
MANAGER

```
SELECT COUNT(*)  
FROM EMP  
WHERE JOB IN ('MANAGER' , 'CLERK' );
```

6.WAQTD TOTAL SALARY NEEDED TO PAY EMPLOYEES
HIRED IN FEB

```
SELECT SUM(SAL)  
FROM EMP  
WHERE HIREDATE LIKE '%FEB%';
```

7.WAQTD NUMBER OF EMPLOYEES REPORTING TO 7839 (MGR)

```
SELECT COUNT(*) FROM  
EMP  
WHERE MGR = 7839 ;
```

8.WAQTD NUMBER OF EMPLOYEES GETTING COMISSION IN
DEPTNO 30

```
SELECT COUNT(*)  
FROM EMP  
WHERE COMM IS NOT NULL AND DEPTNO = 30 ;  
OR  
SELECT COUNT(COMM)  
FROM EMP  
WHERE DEPTNO = 30 ;
```

9.WAQTD AVG SAL , TOTAL SAL , NUMBER OF EMPS AND
MAXIMUM SALARY GIVEN TO EMPLOYEES WORKING AS
PERSIDENT

```
SELECT AVG(SAL) , SUM(SAL) , COUNT(*) , MAX(SAL)  
FROM EMP  
WHERE JOB = 'PRESIDENT' ;
```

10.WAQTD NUMBER OF EMPLOYEES HAVING 'A' IN THEIR NAMES

```
SELECT COUNT(*)  
FROM EMP  
WHERE ENAME LIKE '%A%';
```

11.WAQTD NUMBER OF EMPS AND TOTAL SALARY NEEDED TO PAY THE EMPLOYEES WHO HAVE 2 CONSICUTIVE L's IN THEIR NAMES

```
SELECT COUNT(*) , SUM(SAL)  
FROM EMP  
WHERE ENAME LIKE '%LL%';
```

12.WAQTD NUMBER OF DEPARTMENTS PRESENT IN EMPLOYEE TABLE

```
SELECT COUNT( DISTINCT DEPTNO )  
FROM EMP ;
```

13.WAQTD NUMBER OF EMPLOYEES HAVING CHARACTER '_' IN THEIR NAMES

```
SELECT COUNT(*)  
FROM EMP  
WHERE ENAME LIKE '%! _%' ESCAPE '!' ;
```

14.WAQTD NUMBER OF EMPLOYEES HAVING 2 PERCENTILES IN THEIR NAMES

```
SELECT COUNT(*)  
FROM EMP  
WHERE ENAME LIKE '%!%%!%%' ESCAPE '!' ;
```

15.WAQTD TOTAL SALARY GIVEN TO EMPLOYEES WORKING AS CLERK IN DEPT 30

```
SELECT SUM(SAL)  
FROM EMP  
WHERE JOB ='CLERK' AND DEPTNO = 30 ;
```

16.WAQTD MAXIMUM SALARY GIVEN TO THE EMPLOYEES WORKING AS ANALYST

```
SELECT MAX(Sal)  
FROM EMP  
WHERE JOB ='ANALYST' ;
```

17.WAQTD NUMBER OF DISTINCT SALARIES PRESENT IN EMPLOYEE TABLE

```
SELECT COUNT( DISTINCT SAL )  
FROM EMP ;
```

18.WAQTD NUMBER OF JOBS PRESENT IN EMPLOYEE TABLE

```
SELECT COUNT( DISTINCT JOB )  
FROM EMP ;
```

19.WATQD AVG SALARY GIVEN TO THE CLERK

```
SELECT AVG(SAL)  
FROM EMP  
WHERE JOB ='CLERK' ;
```

20. WAQTD MINIMUM SALARY GIVEN TO THE EMPLOYEES WHO
WORK IN DEPT 10 AS MANAGER OR A CLERK

```
SELECT MIN(SAL)
FROM EMP
WHERE DEPTNO = 10 AND JOB IN ( 'MANAGER' , 'CLERK' );
```


ASSIGNEMENT ON GROUP BY CLAUSE

1.WAQTD NUMBER OF EMPLOYEES WORKING IN EACH DEPARTEMENT EXCEPT PRESIDENT

```
SELECT DEPTNO, COUNT(*)  
FROM EMP  
WHERE JOB NOT IN 'PRESIDENT'  
GROUP BY DEPTNO;
```

2.WAQTD TOTAL SALARY NEEDED TO PAY ALL THE EMPLOYEES IN EACH JOB

```
SELECT JOB , SUM(SAL)  
FROM EMP  
GROUP BY JOB
```

3.WAQTD NUMBER OF EMPLOYEEES WORKING AS MANAGER IN EACH DEPARTMENT

```
SELECT DEPTNO, COUNT(*)  
FROM EMP  
WHERE JOB='MANAGER'  
GROUP BY DEPTNO;
```

4.WAQTD AVG SALARY NEEDED TO PAY ALL THE EMPLOYEES IN EACH DEPARTMENT EXCLUDING THE EMPLOYEES OF DEPTNO 20

```
SELECT DEPTNO, AVG(SAL)  
FROM EMP  
WHERE DEPTNO NOT IN 20  
GROUP BY DEPTNO;
```

5.WAQTD NUMBER OF EMPLOYEES HAVING CHARACTER 'A' IN THEIR NAMES IN EACH JOB

```
SELECT JOB, COUNT(*)  
FROM EMP  
WHERE ENAME LIKE '%A%'  
GROUP BY JOB;
```

6.WAQTD NUMBER OF EMPLOYEES AND AVG SALARY
NEEDED TO PAY THE EMPLOYEES WHO SALARY IN
GREATER THAN 2000 IN EACH DEPT

```
SELECT DEPTNO, COUNT(*) , AVG(SAL)  
FROM EMP  
WHERE SAL > 2000  
GROUP BY DEPTNO;
```

7.WAQDTD TOTAL SALARY NEEDED TO PAY AND NUMBER
OF SALESMANS IN EACH DEPT

```
SELECT DEPTNO, COUNT(*) , SUM(SAL)  
FROM EMP  
WHERE JOB='SALESMAN'  
GROUP BY DEPTNO;
```

8.WAQTD NUMBER OF EMPLOYEES WITH THEIR MAXIMUM
SALARIES IN EACH JOB

```
SELECT JOB, COUNT(*) , MAX(SAL)  
FROM EMP  
GROUP BY JOB;
```

9.WAQTD MAXIMUM SALARIES GIVEN TO AN EMPLOYEE
WORKING IN EACH DEPT

```
SELECT DEPTNO, MAX(SAL)  
FROM EMP  
GROUP BY DEPTNO;
```

10.WAQTD NUMBER OF TIMES THE SALARIES PRESENT IN
EMPLOYEE TABLE

```
SELECT SAL , COUNT(*)  
FROM EMP  
GROUP BY SAL;
```

ASSIGNMENT ON HAVING CLAUSE

1.WAQTD DNO AND NUMBER OF EMP WORKING IN EACH DEPT IF THERE ARE ATLEAST 2 CLERKS IN EACH DEPT

```
SELECT DEPTNO,COUNT(*)  
FROM EMP  
WHERE JOB IN 'CLERK'  
GROUP BY DEPTNO  
HAVING COUNT(*)>=2;
```

2.WAQTD DNO AND TOTAL SAALARY NEEDED TO PAY ALL EMP IN EACH DEPT IF THERE ARE ATLEAST 4 EMP IN EACH DEPT

```
SELECT DEPTNO, SUM(SAL)  
FROM EMP  
GROUP BY DEPTNO  
HAVING COUNT(*)>=4;
```

3.WAQTD NUMBER OF EMP EARNING SAL MORE THAN 1200 IN EACH JOB AND THE TOTAL SAL NEEDED TO PAY EMP OF EACH JOB MUST EXCEEDS 3800

```
SELECT JOB, COUNT(*),  
FROM EMP  
WHERE SAL>1200  
GROUP BY JOB  
HAVING SUM(SAL)>3800;
```

4.WAQTD DEPTNO AND NUMBER OF EMP WORKING ONLY IF THERE ARE 2 EMP WORKING IN EACH DEPT AS MANAGER .

```
SELECT DEPTNO, COUNT(*),  
FROM EMP  
WHERE JOB IN 'MANAGER'  
GROUP BY DEPTNO  
HAVING COUNT(*)=2;
```

5.WAQTD JOB AND MAX SAL OF EMP IN EACH JOB IF THE MAX SAL EXCEEDS 2600

```
SELECT JOB, MAX(SAL),  
FROM EMP  
GROUP BY JOB  
HAVING MAX(SAL)>2600;
```

6.WAQTD THE SALARIES WHICH ARE REPEATED IN EMP TABLE

```
SELECT SAL  
FROM EMP  
GROUP BY SAL  
HAVING COUNT(SAL)>1;
```

7.WAQTD THE HIREDATE WHICH ARE DUPLICATED IN EMP TABLE

```
SELECT HIREDATE  
FROM EMP  
GROUP BY HIREDATE  
HAVING COUNT(HIREDATE)>1;
```

8.WAQTD AVG SALARY OF EACH DEPT IF AVG SAL IS LESS THAN 3000

```
SELECT AVG(SAL), DEPTNO  
FROM EMP  
GROUP BY DEPTNO  
HAVING AVG(SAL)<3000;
```

9.WAQTD DEPTNO IF THERE ARE ATLEAST 3 EMP IN EACH DEPT WHOSE NAME HAS CHAR 'A' OR 'S' .

```
SELECT DEPTNO  
FROM EMP  
WHERE ENAME LIKE '%A%' OR ENAME LIKE '%S%'  
GROUP BY DEPTNO  
HAVING COUNT(*)>=3;
```

10. WAQTD MIN AND MAX SALARIES OF EACH JOB IF MIN SAL IS MORE THAN 1000 AND MAX SAL IS LESS THAN 5000 .

```
SELECT MIN(SAL), MAX(SAL), JOB  
FROM EMP  
GROUP BY JOB  
HAVING MIN(SAL)>1000 AND MAX(SAL)<5000;
```

ASSIGNMENT ON SUBQUERY CASE 1

1.WAQTD NAME OF THE EMPLOYEES EARNING MORE THAN ADAMS

```
SELECT ENAME  
FROM EMP  
WHERE SAL > ( SELECT SAL  
                FROM EMP  
                WHERE ENAME ='ADAMS' );
```

2.WAQTD NAME AND SALARY OF THE EMPLOYEES EARNING LESS THAN KING

```
SELECT ENAME , SAL  
FROM EMP  
WHERE SAL < ( SELECT SAL  
                FROM EMP  
                WHERE ENAME ='KING' );
```

3.WAQTD NAME AND DEPTNO OF THE EMPLOYEES IF THEY ARE WORKING IN THE SAME DEPT AS JONES

```
SELECT ENAME , DEPTNO  
FROM EMP  
WHERE DEPTNO = ( SELECT DEPTNO  
                  FROM EMP  
                  WHERE ENAME =JONES');;
```

4.WAQTD NAME AND JOB OF ALL THE EMPLOYEES WORKING IN THE SAME DESIGNATION AS JAMES

```
SELECT ENAME , JOB FROM EMP  
WHERE JOB = ( SELECT JOB  
               FROM EMP  
               WHERE ENAME ='JAMES' );
```

5.WAQTD EMPNO AND ENAME ALONG WITH ANNUAL SALARY OF ALL THEEMPLOYEES IF THEIR ANNUAL SALARY IS GREATER THAN WARDS ANNUAL SALARY.

```
SELECT EMPNO , ENAME , SAL*12
FROM EMP
WHERE SAL * 12 > ( SELECT SAL*12
                    FROM EMP
                    WHERE ENAME = 'WARD' );
```

6.WAQTD NAME AND HIREDATE OF THE EMPLOYEES IF THEY ARE HIRED BEFORE SCOTT

```
SELECT ENAME , HIREDATE
FROM EMP
WHERE HIREDATE < ( SELECT HIREDATE
                   FROM EMP
                   WHERE ENAME ='SCOTT' );
```

7.WAQTD NAME AND HIREDATE OF THE EMPLOYEES IF THEY ARE HIRED AFTER THE PRESIDENT

```
SELECT ENAME , HIREDATE
FROM EMP
WHERE HIREDATE > ( SELECT HIREDATE
                   FROM EMP
                   WHERE JOB = 'PRESIDENT' );
```

8.WAQTD NAME AND SAL OF THE EMPLOYEE IF THEY ARE EARNING SAL LESS THAN THE EMPLOYEE WHOS EMPNO IS 7839

```
SELECT ENAME , SAL
FROM EMP
WHERE SAL < ( SELECT SAL
              FROM EMP
              WHERE EMPNO = 7839 );
```


9.WAQTD ALL THE DETAILS OF THE EMPLOYEES IF THE EMPLOYEES ARE HIRED BEFORE MILLER

```
SELECT *  
FROM EMP  
WHERE HIREDATE < ( SELECT HIREDATE  
                    FROM EMP  
                    WHERE ENAME ='MILLER' );
```



10.WAQTD ENAME AND EMPNO OF THE EMPLOYEES IF EMPLOYEES ARE EARNING MORE THAN ALLEN

```
SELECT ENAME , EMPNO  
FROM EMP  
WHERE SAL > ( SELECT SAL  
              FROM EMP  
              WHERE ENAME ='ALLEN' );
```

11.WAQTD ENAME AND SALARY OF ALL THE EMPLOYEES WHO ARE EARNING MORE THAN MILLER BUT LESS THAN ALLEN

```
SELECT ENAME , SAL  
FROM EMP  
WHERE SAL > ( SELECT SAL  
              FROM EMP  
              WHERE ENAME ='MILLER' ) AND  
SAL < ( SELECT SAL  
        FROM EMP  
        WHERE ENAME ='ALLEN' );
```

12.WAQTD ALL THE DETAILS OF THE EMPLOYEES WORKING IN DEPT 20 AND WORKING IN THE SAME DESIGNATION AS SMITH

```
SELECT *  
FROM EMP  
WHERE DEPTNO = 20 AND JOB = ( SELECT JOB  
                             FROM EMP  
                             WHERE ENAME ='SMITH');
```

13.WAQT D ALL THE DETAILS OF THE EMPLOYEES WORKING AS
MANAGER IN THE SAME DEPT AS TURNER

```
SELECT *  
FROM EMP  
WHERE JOB ='MANAGER' AND DEPTNO = ( SELECT DEPTNO  
                                     FROM EMP  
                                     WHERE ENAME ='TURNER' );
```

14.WAQT D NAME AND HIREDATE OF THE EMPLOYEES HIRED AFTER
1980 AND BEFORE KING

```
SELECT ENAME , HIREDATE  
FROM EMP  
WHERE HIREDATE > '31-DEC-1980 ' AND  
      HIREDATE < ( SELECT HIREDATE  
                  FROM EMP  
                  WHERE ENAME ='KING' );
```

15.WAQT D NAME AND SAL ALONG WITH ANNUAL SAL FOR ALL
EMPLOYEES WHOS SAL IS LESS THAN BLAKE AND MORE THAN 3500

```
SELECT ENAME , SAL , SAL*12  
FROM EMP  
WHERE SAL > 3500 AND SAL < ( SELECT SAL  
                             FROM EMP  
                             WHERE ENAME ='BLAKE' );
```

16.WAQT D ALL THE DETAILS OF EMPLOYEES WHO EARN MORE THAN
SCOTT BUT LESS THAN KING

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

17.WAQTD NAME OF THE EMPLOYEES WHOSE NAME STARTS WITH 'A'
AND WORKS IN THE SAME DEPT AS BLAKE

[illegible]

18. WAQTD NAME AND COMM IF EMPLOYEES EARN COMMISSION AND
WORK IN THE SAME DESIGNATION AS SMITH

```
SELECT ENAME , COMM
FROM EMP
WHERE COMM IS NOT NULL AND JOB = ( SELECT JOB
                                   FROM EMP
                                   WHERE ENAME ='SMITH');
```

19. WAQTD DETAILS OF ALL THE EMPLOYEES WORKING AS CLERK IN THE SAME DEPT AS TURNER

```
SELECT *
FROM EMP
WHERE JOB ='CLERK' AND DEPTNO = ( SELECT DEPTNO
FROM EMP
WHERE ENAME ='TURNER' );
```

20. WAQTD ENAME, SAL AND DESIGNATION OF THE EMPLOYEES
WHOSE ANNUAL SALARY IS MORE THAN SMITH AND LESS THAN
KING

```
SELECT ENAME , SAL , JOB
FROM EMP
WHERE SAL*12 > ( SELECT SAL *12
                  FROM EMP
                  WHERE ENAME ='SMITH') AND
SAL *12 < ( SELECT SAL *12
            FROM EMP
            WHERE ENAME ='KING' );
```

ASSIGNMENT ON SUBQUERY CASE 2 :

1.WAQTD DNAME OF THE EMPLOYEES WHOSE NAME IS SMITH

```
SELECT DNAME  
FROM DEPT  
WHERE DEPTNO = ( SELECT DEPTNO  
                  FROM EMP  
                  WHERE ENAME ='SMITH' ) ;
```

2.WAQTD DNAME AND LOC OF THE EMPLOYEE WHOSE ENAME IS KING

```
SELECT DNAME ,LOC  
FROM DEPT  
WHERE DEPTNO = ( SELECT DEPTNO  
                  FROM EMP  
                  WHERE ENAME ="KING' ) ;
```

3.WAQTD LOC OF THE EMP WHOSE EMPLOYEE NUMBER IS 7902

```
SELECT LOC  
FROM DEPT  
WHERE DEPTNO = ( SELECT DEPTNO  
                  FROM EMP  
                  WHERE EMPNO=7902 ) ;
```

4.WAQTD DNAME AND LOC ALONG WITH DEPTNO OF THE EMPLOYEE WHOSE NAME ENDS WITH 'R'.

```
SELECT DNAME , LOC, DEPTNO  
FROM DEPT  
WHERE DEPTNO = ( SELECT DEPTNO  
                  FROM EMP  
                  WHERE ENAME LIKE '%R' ) ;
```

5.WAQTD DNAME OF THE EMPLOYEE WHOSE DESIGNATION IS PRESIDENT

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

6.WAQTD NAMES OF THE EMPLOYEES WORKING IN ACCOUNTING DEPARTMENT

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

7.WAQTD ENAME AND SALARIES OF THE EMPLOYEES WHO ARE WORKING IN THE LOCATION 'CHICAGO'

```
SELECT ENAME ,SAL
FROM EMP
WHERE DEPTNO = ( SELECT DEPTNO
                  FROM DEPT
                  WHERE LOC = 'CHICAGO' );
```

8.WAQTD DETAILS OF THE EMPLOYEES WORKING IN SALES

```
SELECT *
FROM EMP
WHERE DEPTNO = ( SELECT DEPTNO
                  FROM DEPT
                  WHERE DNAME ='SALES' );
```

9.WAQTD DETAILS OF THE EMP ALONG WITH ANNUAL SALARY IF EMPLOYEES ARE WORKING IN NEW YORK

```
SELECT EMP.* , SAL*12
FROM EMP
WHERE DEPTNO = ( SELECT DEPTNO
                  FROM DEPT
                  WHERE LOC ='NEW YORK' );
```

10.WAQT D NAMES OF EMPLOYEES WORKING IN OPERATIONS
DEPARTMENT

```
SELECT ENAME
FROM EMP
WHERE DEPTNO = ( SELECT DEPTNO
                  FROM DEPT
                  WHERE DNAME ='OPERATIONS' );
```

ASSIGNMENT ON SUBQUERY CASE 1 & 2 :

1.WAQTD NAMES OF THE EMPLOYEES EARNING MORE THAN SCOTT
IN ACCOUNTING DEPT

```
SELECT ENAME  
FROM EMP  
WHERE SAL > ( SELECT SAL  
                FROM EMP  
                WHERE ENAME ='SCOTT' ) AND  
DEPTNO = ( SELECT DEPTNO  
            FROM DEPT  
            WHERE DNAME = 'ACCOUNTING');
```

2.WAQTD DETAILS OF THE EMPLOYEES WORKING AS MANAGER IN
THE LOCATION CHICAGO

```
SELECT *  
FROM EMP  
WHERE JOB ='MANAGER' AND DEPTNO = ( SELECT DEPTNO  
                                     FROM DEPT  
                                     WHERE LOC ='CHICAGO');
```

3.WAQTD NAME AND SAL OF THE EMPLOYEES EARNING MORE THAN
KING IN THE DEPT ACCOUNTING

```
SELECT ENAME ,SAL  
FROM EMP  
WHERE SAL > ( SELECT SAL  
                FROM EMP  
                WHERE ENAME ='KING' ) AND  
DEPTNO = ( SELECT DEPTNO  
            FROM DEPT  
            WHERE DNAME = 'ACCOUNTING');
```

4.WAQTD DETAILS OF THE EMPLOYEES WORKING AS SALESMAN IN
THE DEPARTEMENT SALES


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

5.WAQTD NAME , SAL , JOB , HIREDATE OF THE EMPLOYEES WORKING
IN OPERATIONS DEPARTMENT AND HIRED BEFORE KING

```
SELECT ENAME ,SAL , JOB , HIREDATE  
FROM EMP  
WHERE HIREDATE < ( SELECT HIREDATE  
                   FROM EMP  
                   WHERE ENAME ='KING') AND  
DEPTNO = ( SELECT DEPTNO  
           FROM DEPT  
           WHERE DNAME ='OPERATIONS');
```

6.DISPLAY ALL THE EMPLOYEES WHOSE DEPARTMET NAMES ENDING
'S'.

```
SELECT ENAME  
FROM EMP  
WHERE DEPTNO = ( SELECT DEPTNO  
                 FROM DEPT  
                 WHERE DNAME LIKE '%S' );
```

7.WAQTD DNAME OF THE EMPLOYEES WHOSE NAMES HAS
CHARACTER 'A' IN IT .

```
SELECT DNAME  
FROM DEPT  
WHERE DEPTNO IN ( SELECT DEPTNO  
                  FROM EMP  
                  WHERE ENAME LIKE '%A%' );
```

8.WAQTD DNAME AND LOC OF THE EMPLOYEES WHOSE SALARY IS RUPEES 800 .

```
SELECT DNAME , LOC
FROM DEPT
WHERE DEPTNO = ( SELECT DEPTNO
                  FROM EMP
                  WHERE SAL = 800) ;
```

9.WAQTD DNAME OF THE EMPLOYEES WHO EARN COMMISSION

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

10.WAQTD LOC OF THE EMPLOYEES IF THEY EARN COMMISSION IN DEPT 40

```
SELECT LOC
FROM DEPT
WHERE DEPTNO = 40 AND DEPTNO = ( SELECT DEPTNO
                                  FROM EMP
                                  WHERE COMM IS NOT NULL ) ;
```

OR

```
SELECT LOC
FROM DEPT
WHERE DEPTNO = ( SELECT DEPTNO
                  FROM EMP
                  WHERE COMM IS NOT NULL AND DEPTNO = 40 ) ;
```

ASSIGNMENT ON MAX & MIN :

1.WAQTD NAME OF THE EMPLOYEE EARNING MAXIMUM SALARY

```
SELECT ENAME  
FROM EMP  
WHERE SAL = ( SELECT MAX(SAL)  
                FROM EMP );
```

2.WAQTD NAME OF THE EMPLOYEE EARNING MINIMUM SALARY

```
SELECT ENAME  
FROM EMP  
WHERE SAL = ( SELECT MIN(SAL)  
                FROM EMP );
```

3.WAQTD NAME AND HIREDATE OF THE EMPLOYEE HIRED BEFORE ALL THE EMPLOYEES (FIRST EMP)

```
SELECT ENAME , HIREDATE  
FROM EMP  
WHERE HIREDATE = ( SELECT MIN(HIREDATE)  
                    FROM EMP );
```

4.WAQTD NAME AND HIREDATE OF THE EMPLOYEES HIRED AT THE LAST

```
SELECT ENAME , HIREDATE  
FROM EMP  
WHERE HIREDATE = ( SELECT MAX(HIREDATE)  
                    FROM EMP );
```

5.WAQTD NAME, COMM OF THE EMPLOYEE WHO EARNS MIN COMMISSION

```
SELECT ENAME , COMM
FROM EMP
WHERE COMM= ( SELECT MIN(COMM)
                FROM EMP );
```

6.WAQTD NAME, SAL AND COMM OF THE EMPLOYEE EARNING
MAXIMUM COMISSION

```
SELECT ENAME ,SAL, COMM
FROM EMP
WHERE COMM= ( SELECT MAX(COMM)
                FROM EMP );
```

7.WAQTD DETAILS OF THE EMPLOYEE WHO HAS GREATEST EMPNO

```
SELECT *
FROM EMP
WHERE EMPNO= ( SELECT MAX(EMPNO)
                FROM EMP );
```

8.WAQTD DETAILS OF THE EMPLOYEES HAVING THE LEAST
HIREDATE

```
SELECT *
FROM EMP
WHERE HIREDATE= ( SELECT MIN(HIREDATE)
                  FROM EMP );
```

9.WAQTD DETAILS OF THE EMPLOYEES EARNING LEAST ANNUAL
SALARY

```
SELECT ENAME
FROM EMP
WHERE SAL*12= ( SELECT MIN(SAL*12)
                FROM EMP );
```

10. WAQTD NAME , ANNUAL SALARY OF THE EMPLOYEES IF THEIR ANNUAL SALARY IS MORE THAN ALL THE SALESMAN

```
SELECT ENAME , SAL*12
FROM EMP
WHERE SAL*12 > ALL ( SELECT SAL*12
                     FROM EMP
                     WHERE JOB ='SALESMAN' );
```

ASSIGNMENT ON TYPES OF SUB QUERY .

1.WAQTD NAME OF THE EMPLOYEES EARNING SALARY MORE THAN THE SALESMAN

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

2.WAQTD DETAILS OF THE EMPLOYEES HIRED AFTER ALL THE CLERKS

```
SELECT *  
FROM EMP  
WHERE HIREDATE > ALL(SELECT HIREDATE  
                     FROM EMP  
                     WHERE JOB='CLERKS');
```

3.WAQTD NAME AND SALARY FOR ALL THE EMPLOYEES IF THEY ARE EARNING LESS THAN ATLEST A MANAGER

```
SELECT ENAME, SAL  
FROM EMP  
WHERE SAL < ANY (SELECT SAL  
                 FROM EMP  
                 WHERE JOB='MANAGER');
```

4.WAQTD NAME AND HIREDATE OF EMPLOYEES HIRED BEFORE ALL THE MANAGERS

```
SELECT ENAME, HIREDATE
FROM EMP
WHERE HIREDATE < ALL(SELECT HIREDATE
                     FROM EMP
                     WHERE JOB='MANAGER');
```

5. WAQTD NAMES OF THE EMPLOYEES HIRED AFTER ALL THE MANAGERS AND EARNING SALARY MORE THAN ALL THE CLERKS

```
SELECT ENAME, HIREDATE
FROM EMP
WHERE HIREDATE > ALL(SELECT HIREDATE
                     FROM EMP
                     WHERE JOB='MANAGER') AND
SAL < ALL (SELECT SAL
           FROM EMP
           WHERE JOB='CLERK');
```

6. WAQTD DETAILS OF THE EMPLOYEES WORKING AS CLERK AND HIRED BEFORE ATLEST A SALESMAN

```
SELECT *
FROM EMP
WHERE JOB IN ('CLERK') AND HIREDATE < ANY (SELECT HIREDATE
                                           FROM EMP
                                           WHERE JOB='SALESMAN');
```

7. WAQTD DETAILS OF EMPLOYEES WORKING IN ACCOUNTING OR SALES DEPT

```
SELECT *  
FROM EMP  
WHERE DEPTNO IN (SELECT DEPTNO  
                  FROM DEPT  
                  WHERE DNAME IN ('ACCOUNTING', 'SALES'));
```

8.WAQTD DEPARTMENT NAMES OF THE EMPLOYEES WITH NAME SMITH , KING AND MILLER

```
SELECT DNAME  
FROM DEPT  
WHERE DEPTNO IN (SELECT DEPTNO  
                  FROM EMP  
                  WHERE ENAME IN ('SMITH', 'KING', 'MILLER'));
```

9.WAQTD DETAILS OF EMPLOYEES WORKING IN NEW YORK OR CHICAGO

```
SELECT *  
FROM EMP  
WHERE DEPTNO IN (SELECT DEPTNO  
                  FROM DEPT  
                  WHERE LOC IN ('NEW YORK', 'CHICAGO'));
```

10.WAQTD EMP NAMES IF EMPLOYEES ARE HIRED AFTER ALL THE EMPLOYEES OF DEPT 10

```
SELECT ENAME  
FROM EMP  
WHERE HIREDATE > ALL (SELECT HIREDATE  
                      FROM EMP  
                      WHERE DEPTNO IN 10;
```


4.WAQTD EMPNO OF THE EMPLOYEE EARNING 2ND MAXIMUM SALARY

```
SELECT EMPNO
FROM EMP
WHERE SAL IN (SELECT MAX(SAL)
              FROM EMP
              WHERE SAL < (SELECT MAX(SAL)
                           FROM EMP));
```

5.WAQTD DEPARTMENT NAME OF AN EMPLOYEE GETTING 4TH MAX SAL

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

6.WAQTD DETAILS OF THE EMPLOYEE WHO WAS HIRED 2nd

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

7.WAQTD NAME OF THE EMPLOYEE HIRED BEFORE THE LAST EMPLOYEE

```
SELECT ENAME  
FROM EMP  
WHERE HIREDATE <(SELECT MAX(HIREDATE)  
                 FROM EMP);
```

8.WAQTD LOC OF THE EMPLOYEE WHO WAS HIRED FIRST

```
SELECT LOC  
FROM DEPT  
WHERE DEPTNO IN (SELECT DEPTNO  
                 FROM EMP  
                 WHERE HIREDATE IN (SELECT MIN(HIREDATE)  
                                     FROM EMP));
```

9.WAQTD DETAILS OF THE EMPLOYEE EARNING 7TH MINIMUM SALARY

WRITE 6 SUBQUERIES WITH ONE OUTER QUERY BY PASSING MIN(SAL) IN SELECT CLAUSE OF OUTER QUERY.

10.WAQTD DNAME OF EMPLOYEE GETTING 2ND MAXIMUM SALARY

ASSIGNMENT ON EMP-MGR RELATIONSHIP :

1.WAQTD SMITHS REPORTING MANAGER'S NAME

```
SELECT ENAME
FROM EMP
WHERE EMPNO IN ( SELECT MGR
                  FROM EMP
                  WHERE ENAME ='SMITH' );
```

2.WAQTD ADAMS MANAGER'S MANAGER NAME

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

3.WAQTD DNAME OF JONES MANAGER

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

4.WAQTD MILLER'S MANAGER'S SALARY

```
SELECT SAL
FROM EMP
WHERE EMPNO IN ( SELECT MGR
                  FROM EMP
                  WHERE ENAME ='MILLER' );
```

5.WAQTD LOC OF SMITH'S MANAGER'S MANAGER.

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

6.WAQTD NAME OF THE EMPLOYEES REPORTING TO BLAKE

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

7.WAQTD NUMBER OF EMPLOYEES REPORTING TO KING

```
SELECT COUNT(ENAME)
FROM EMP
WHERE MGR IN ( SELECT EMPNO
               FROM EMP
               WHERE ENAME ='KING' );
```

8.WAQTD DETAILS OF THE EMPLOYEES REPORTING TO JONES

```
SELECT *
FROM EMP
WHERE MGR IN ( SELECT EMPNO
               FROM EMP
               WHERE ENAME ='JONES' );
```


ASSIGNMENT ON INNER JOIN :

1.WAQTD NAMES OF THE EMPLOYEE AND LOCATION OF ALL THE EMPLOYEES .

```
SELECT ENAME , LOC  
FROM EMP , DEPT  
WHERE EMP.DEPTNO = DEPT.DEPTNO ;
```

2.WAQTD DNAME AND SALARY FOR ALL THE EMPLOYEE WORKING IN ACCOUNTING.

```
SELECT DNAME , SAL  
FROM EMP , DEPT  
WHERE EMP.DEPTNO = DEPT.DEPTNO AND DNAME ='ACCOUNTING';
```

3.WAQTD DNAME AND ANNUAL SALARY FOR ALL EMPLOYEES WHOSE SALARY IS MORE THAN 2340

```
SELECT DNAME , SAL*12  
FROM EMP , DEPT  
WHERE EMP.DEPTNO = DEPT.DEPTNO AND SAL > 2340 ;
```

4.WAQTD ENAME AND DNAME FOR EMPLOYEES HAVING CHARACTER 'A' IN THEIR DNAME

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

5.WAQTD ENAME AND DNAME FOR ALL THE EMPLOYEES WORKING AS SALESMAN

```
SELECT ENAME , DNAME  
FROM EMP , DEPT  
WHERE EMP.DEPTNO = DEPT.DEPTNO AND JOB ='SALESMAN' ;
```


6.WADTD DNAME AND JOB FOR ALL THE EMPLOYEES WHOSE JOB AND DNAME STARTS WITH CHARACTER 'S'

```
SELECT DNAME ,JOB  
FROM EMP , DEPT  
WHERE EMP.DEPTNO = DEPT.DEPTNO AND JOB LIKE 'S%' AND DNAME  
LIKE 'S%' ;
```

7.WAQTD DNAME AND MGR NO FOR EMPLOYEES REPORTING TO 7839

```
SELECT DNAME , MGR  
FROM EMP , DEPT  
WHERE EMP.DEPTNO = DEPT.DEPTNO AND MGR = 7839 ;
```

8.WAQTD DNAME AND HIREDATE FOR EMPLOYEES HIRED AFTER 83 INTO ACCOUNTING OR RESEARCH DEPT

```
SELECT DNAME , HIREDATE  
FROM EMP , DEPT  
WHERE EMP.DEPTNO = DEPT.DEPTNO AND HIREDATE > '31-DEC-83'  
AND DNAME IN ('ACCOUNTING' , 'RESEARCH' );
```

9.WAQTD ENAME AND DNAME OF THE EMPLOYEES WHO ARE GETTING COMM IN DEPT 10 OR 30

```
SELECT ENAME , DNAME  
FROM EMP , DEPT  
WHERE EMP.DEPTNO = DEPT.DEPTNO AND COMM IS NOT NULL AND  
EMP.DEPTNO IN ( 10 , 30 ) ;
```

10.WAQTD DNAME AND EMPNO FOR ALL THE EMPLOYEES WHOSE EMPNO ARE (7839,7902) AND ARE WORKING IN LOC NEW YORK.

```
SELECT DNAME , EMPNO  
FROM EMP , DEPT  
WHERE EMP.DEPTNO = DEPT.DEPTNO AND EMPNO IN (7839,7902) AND  
LOC = 'NEW YORK' ;
```

ASSIGNMENT ON SELF JOIN :

1.WAQTD NAME OF THE EMPLOYEE AND HIS MANAGER'S NAME IF EMPLOYEE IS WORKING AS CLERK

```
SELECT E1.ENAME , E2.ENAME  
FROM EMP E1 , EMP E2  
WHERE E1.MGR = E2.EMPNO AND E1.JOB = 'CLERK';
```

2.WAQTD NAME OF THE EMPLOYEE AND MANAGER'S DESIGNATION IF MANAGER WORKS IN DEPT 10 OR 20

```
SELECT E1.ENAME , E2.JOB  
FROM EMP E1 , EMP E2  
WHERE E1.MGR = E2.EMPNO AND E2.DEPTNO IN ( 10 , 20 );
```

3.WAQTD NAME OF THE EMP AND MANAGERS SALARY IF EMPLOYEE AND MANAGER BOTH EARN MORE THAN 2300

```
SELECT E1.ENAME , E2.SAL  
FROM EMP E1 , EMP E2  
WHERE E1.MGR = E2.EMPNO AND E1.SAL > 2300 AND E2.SAL>2300 ;
```

4.WAQTD EMP NAME AND MANAGER'S HIREDATE IF EMPLOYEE WAS HIRED BEFORE 1982

```
SELECT E1.ENAME , E2.HIREDATE  
FROM EMP E1 , EMP E2  
WHERE E1.MGR = E2.EMPNO AND E1.HIREDATE < '01-JAN-82' ;
```

5.WAQTD EMP NAME AND MANAGER'S COMM IF EMPLOYEE WORKS AS SALESMAN AND MANAGER WORKS IN DEPT 30

**SELECT E1.ENAME , E2.COMM
FROM EMP E1 , EMP E2
WHERE E1.MGR = E2.EMPNO AND E1.JOB = 'SALESMAN' AND
E2.DEPTNO = 30 ;**

6.WAQTD EMP NAME AND MANAGER NAME AND THEIR SALARIES IF
EMPLOYEE EARNS MORE THAN MANAGER

**SELECT E1.ENAME, E1.SAL , E2.ENAME , E2.SAL
FROM EMP E1 , EMP E2
WHERE E1.MGR = E2.EMPNO AND E1.SAL > E2.SAL ;**

7.WAQTD EMP NAME AND HIREDATE , MANAGER NAME AND
HIREDATE IF MANAGER WAS HIRED BEFORE EMPLOYEE

**SELECT E1.ENAME ,E1.HIREDATE , E2.ENAME , E2.HIREDATE
FROM EMP E1 , EMP E2
WHERE E1.MGR = E2.EMPNO AND E2.HIREDATE < E1.HIREDATE ;**

8.WAQTD EMP NAME AND MANAGER NAME IF BOTH ARE WORKING
IN SAME JOB

**SELECT E1.ENAME , E2.ENAME
FROM EMP E1 , EMP E2
WHERE E1.MGR = E2.EMPNO AND E1.JOB = E2.JOB ;**

9.WAQTD EMP NAME AND MANAGER NAME IF MANAGER IS
WORKING AS ACTUAL MANAGER

**SELECT E1.ENAME , E2.ENAME
FROM EMP E1 , EMP E2
WHERE E1.MGR = E2.EMPNO AND E2.JOB = 'MANAGER';**

10.WAQTD EMP NAME AND MANAGER NAME ALONG WITH THEIR
ANNUAL SALARIES IF EMPLOYEE WORKS IN DEPT 10 , 20 AND
MANAGER'S SAL IS GREATER THAN EMPLOYEES SALARY

```
SELECT E1.ENAME , E1.SAL*12 , E2.ENAME , E2.SAL*12  
FROM EMP E1 , EMP E2  
WHERE E1.MGR = E2.EMPNO AND E1.DEPTNO IN ( 10,20) AND E2.SAL >  
E1.SAL ;
```

11.WAQTD EMPLOYEE'S NAME AND MANAGER'S DESIGNATION FOR ALL THE EMPLOYEES

```
SELECT E1.ENAME , E2.JOB  
FROM EMP E1 , EMP E2  
WHERE E1.MGR = E2.EMPNO ;
```

12.WAQTD EMPLOYEE'S NAME AND MANAGER'S SALARY FOR ALL THE EMPLOYEES IF MANAGER'S SALARY ENDS WITH 50

```
SELECT E1.ENAME , E2.SAL  
FROM EMP E1 , EMP E2  
WHERE E1.MGR = E2.EMPNO AND E2.SAL LIKE '%50' ;
```

ASSIGNMENT ON SINGLE ROW FUNCTIONS (SRF()) :

1. LIST EMPLOYEES WHOSE NAME HAVING 4 CHARACTERS

```
SELECT *  
FROM EMP  
WHERE LENGTH(ENAME)=4 ;
```

2. LIST EMPLOYEES WHOSE JOB IS HAVING 7 CHARACTERS

```
SELECT *  
FROM EMP  
WHERE LENGTH(JOB)=7;
```

3. FIND OUT HOW MANY TIMES LETTER 'S' OCCURS IN 'QSPIDERS'

```
SELECT LENGTH('QSPIDERS') - LENGTH( REPLACE( 'QSPIDERS' , 'S' ) )  
FROM DUAL ;
```

4. LIST THE EMPLOYEES WHOSE JOB IS HAVING LAST CHARACTERS AS 'MAN'

```
SELECT *  
FROM EMP  
WHERE SUBSTR( JOB , -3 ) = 'MAN' ;
```

5. LIST EMPLOYEES WHOSE JOB IS HAVING FIRST 3 CHARACTERS AS 'MAN'.

```
SELECT *  
FROM EMP  
WHERE SUBSTR( JOB , 1 , 3 ) = 'MAN';
```

6. DISPLAY ALL THE NAMES WHOSE NAME IS HAVING EXACTLY 1 'L'

```
SELECT ENAME
FROM EMP
WHERE LENGTH( ENAME ) - LENGTH( REPLACE( ENAME , 'L' ) ) = 1 ;
```

7. DISPLAY DEPT NAMES WHICH ARE HAVING LETTER 'O'

```
SELECT DNAME
FROM DEPT
WHERE INSTR(DNAME,'O',1,1 ) !=0 ;
```

9. CALCULATE NUMBER OF 'L' IN STRING 'HELLELL'

```
SELECT LENGTH('HELLELL') - LENGTH( REPLACE( 'HELLELL' , 'L' ) )
FROM DUAL ;
```

10. DISPLAY ALL THE EMPLOYEES WHOSE JOB HAS A STRING 'MAN'

```
SELECT *
FROM EMP
WHERE INSTR(JOB,'MAN',1,1 ) !=0 ;
```

11. DISPLAY ALL THE EMPLOYEES WHOSE JOB STARTS WITH
STRING 'MAN'

```
SELECT *
FROM EMP
WHERE INSTR(JOB,'MAN',1,1 ) =1 ;
```

OR

```
SELECT *
FROM EMP
WHERE SUBSTR( JOB ,1,3) = 'MAN' ;
```

12. DISPLAY ALL THE EMPLOYEES WHOSE JOB ENDS WITH STRING
'MAN'

**SELECT ENAME
FROM EMP
WHERE SUBSTR(JOB , -3) = 'MAN' ;**

13. DISPLAY FIRST 3 CHARACTERS OF ENAME IN LOWER CASE AND REST EVERYTHING IN UPPER CASE. IF ENAME IS 'QSPIDERS' THEN DISPLAY THIS AS 'QSPIDERS'

**SELECT LOWER(SUBSTR('QSPIDERS',1,3)) || UPPER(SUBSTR('QSPIDERS',4))
FROM DUAL ;**

14. DISPLAY THE RESULT FROM EMP TABLE AS BELOW.
SMITH IS A CLERK AND GETS SALARY 2000 HERE SMITH IS ENAME COLUMN, CLERK IS JOB AND 2000 IS SAL COLUMN AND REST EVERYTHING IS LITERAL STRINGS.

**SELECT ENAME || ' IS A ' || JOB || ' AND GETS SALARY ' || SAL
FROM EMP
WHERE ENAME = 'SMITH' ;**

15. LIST THE EMPLOYEES HIRED ON A WEDNESDAY

**SELECT *
FROM EMP
WHERE TO_CHAR(HIREDATE , 'DY') = 'WED' ;**

16. LIST THE EMPLOYEES HIRED ON A LEAP YEAR

**SELECT *
FROM EMP
WHERE MOD(TO_CHAR(HIREDATE , 'YY') , 4) = 0 ;**

17. LIST THE EMPLOYEES HIRED ON A SUNDAY IN THE MONTH OF MAY


```
SELECT *  
FROM EMP  
WHERE TO_CHAR( HIREDATE , 'DY' ) = 'SUN' AND TO_CHAR( HIREDATE ,  
'MON' ) = 'MAY' ;
```