Table EMP

1. **Insert a record with suitable data in the table emp, having emp as the Hiredate.**

```
SQL>  insert into emp values (3008,18,'Xavier', 7782, sysdate, 3250, NULL, 20);
```

2. **Write a statement to show the structure of the table emp.**

```
SQL> desc emp;
 Name                      Null?                Type
 ------------------------- --------             ----------------------------
 EMPNO                     NOT NULL             NUMBER(4)
 ENAME                                          VARCHAR2(10)
 JOB                       VARCHAR2(9)
 MGR                                            NUMBER(4)
 HIREDATE                                       DATE
 SAL                                            NUMBER(7,2)
 COMM                                           NUMBER(7,2)
 DEPTNO                                         NUMBER(2)
```

3. **To create a table DEPT30 to hold the all information of employees with deptno 30**

```
SQL> create table dept30 as select * from emp where deptno=30;
Table created.
```

4. **Display names of all employee whose name include either of the substring 'TH' or 'LL'**

```
 SQL> select ename from emp where ename like '%TH%' or ename like '%LL%'
ENAME
----------
SMITH
ALLEN
MILLER
```

5. **Display data for all CLERKS who earn between 1000 and 2000;**

```
SQL> select * from emp where job='CLERK' AND SAL BETWEEN 1000 AND 2000;
   EMPNO  ENAME      JOB        MGR        HIREDATE   SAL        COMM       DEPTNO
   ---------  ----------  ---------  ---------  ---------  ---------  ---------  ---------
   7876       ADAMS      CLERK      7788       23-MAY-87  1100                  20
   7934       MILLER     CLERK      7782       23-JAN-82  1300                  10
```

6. **Find the employees who have no manager.**

```
SQL> select ename from emp where mgr is NULL;
ENAME
----------
KING
```

7. **Display the name of the employee who earns the maximum salary.**

```
SQL> select ename from emp where sal=(select max(sal) from emp
ENAME
----------
KING
```

8. **Write a SQL statement to list empno, empname, deptno for all the employees. The information should be sorted on empname;**

SQL> Select empno, ename, deptno from emp order by ename;

EMPNO	ENAME	DEPTNO
3008	18	20
7876	ADAMS	20
7499	ALLEN	30
7698	BLAKE	30
7782	CLARK	10
7902	FORD	20
7900	JAMES	30
7566	JONES	20
7839	KING	10
7654	MARTIN	30
7934	MILLER	10
7788	SCOTT	20
7369	SMITH	20
7844	TURNER	30
7521	WARD	30

15 rows selected.

9. **List the minimum and maximum salary for each employee.**

SQL> select job, min(sal), max(sal) from emp group by job;

JOB	MIN(SAL)	MAX(SAL)
ANALYST	3000	3000
CLERK	800	1300
MANAGER	2450	2975
PRESIDENT	5000	5000
SALESMAN	1250	1600
Xavier	3250	3250

6 rows selected.

10. **Display the name of the employee who earns the maximum salary.**

SQL> select ename from emp where sal=(select min(sal) from emp);

ENAME

SMITH

11. To display deptno, job, empname in reverse order of salary from emp.

SQL> select deptno, job, ename from emp order by sal

DEPTNO	JOB	ENAME
20	CLERK	SMITH
30	CLERK	JAMES
20	CLERK	ADAMS
30	SALESMAN	WARD
30	SALESMAN	MARTIN
10	CLERK	MILLER
30	SALESMAN	TURNER
30	SALESMAN	ALLEN
10	MANAGER	CLARK
30	MANAGER	BLAKE
20	MANAGER	JONES
20	ANALYST	SCOTT
20	ANALYST	FORD
20	Xavier	18
10	PRESIDENT	KING

15 rows selected.

12. Show the average salary for all departments with more than 3 people for a job.

SQL> select deptno, avg(sal) from emp group by deptno having count(*) > 3;

DEPTNO	AVG(SAL)
20	2354.1667
30	1566.6667

13. Create a view deptno20 with empname and salary of employees for dept 20

SQL> create view deptno20 as select ename, sal from emp where deptno=20;

View created.

14. Write a SQL statement to find out the total number of employees from emp table.

SQL> select count(*) from emp;

COUNT(*)
15

15. Write a suitable sql statement to display employees name, salary and location of all the employees working in new york in the following format

SQL> select ename "EmpName", sal "Salary", dept.loc "Location" from emp, dept where EMP.DEPTNO=DEPT.

EmpName	Salary	Location
CLARK	2450	NEW YORK
KING	5000	NEW YORK
MILLER	1300	NEW YORK

16. Display name and annual salary for all employee.

```
SQL> select ename, sal*12 "Annual Salary" from emp;
ENAME           Annual Salary
----------      -------------
SMITH           9600
ALLEN           19200
WARD            15000
JONES           35700
MARTIN          15000
BLAKE           34200
CLARK           29400
SCOTT           36000
KING            60000
TURNER          18000
ADAMS           13200
JAMES           11400
FORD            36000
MILLER          15600
18              39000
15 rows selected.
```

17. Count no of employee working in each department.

```
SQL> select deptno, count(*) from emp group by deptno;
  DEPTNO        COUNT(*)
  ---------     ---------
    10          3
    20          6
    30          6
```

18. Display names of all employee whose name is at least 4 characters long;

```
SQL> select ename from emp where length(ename)>=4;
ENAME
----------
SMITH
ALLEN
WARD
JONES
MARTIN
BLAKE
CLARK
SCOTT
KING
TURNER
ADAMS
JAMES
FORD
MILLER

14 rows selected.
```

19. Display the current system date.

```
SQL> select sysdate from dual;
SYSDATE
---------
19-JAN-05
```

20. display the current system time;

```
SQL> select to_char(sysdate,'hh:mm:ss') from dual

TO_CHAR(
--------
12:01:01
```

21. Write a SQL query to increase the salary of each employee by 200.

```
SQL> update emp set sal = sal + 200 ;
15 rows updated.
```

22. Display the total salary of all employees

```
SQL> select sum(sal) from emp;
SUM(SAL)
---------
   35275
```

23. display the different job from emp table;

```
SQL> select distinct job from emp
JOB
---------
ANALYST
CLERK
MANAGER
PRESIDENT
SALESMAN
Xavier
6 rows selected.
```

24. Display the names and no of characters in each name

SQL> select ename, length(ename) from emp

ENAME	LENGTH(ENAME)
SMITH	5
ALLEN	5
WARD	4
JONES	5
MARTIN	6
BLAKE	5
CLARK	5
SCOTT	5
KING	4
TURNER	6
ADAMS	5
JAMES	5
FORD	4
MILLER	6
18	2

25. Display ename in lower case and job in upper case

SQL> select lower(ename), upper(job) from emp;

LOWER(ENAM	UPPER(JOB
smith	CLERK
allen	SALESMAN
ward	SALESMAN
jones	MANAGER
martin	SALESMAN
blake	MANAGER
clark	MANAGER
scott	ANALYST
king	PRESIDENT
turner	SALESMAN
adams	CLERK
james	CLERK
ford	ANALYST
miller	CLERK
18	XAVIER

15 rows selected.