Assignment-1

Dept Table:

DeptNo	Dname	Loc
10	Accounts	Bangalore
20	IT	Delhi
30	Production	Chennai
40	Sales	Hyd
50	Admn	London

Emp Table:

EmpNo	Ename	Sal	Hire_Date	Commission	DeptNo	Mgr
1001	Sachin	19000	1-Jan-1980	2100	20	1003
1002	Kapil	15000	1-Jan-1970	2300	10	1003
1003	Stefen	12000	1-Jan-1990	500	20	1007
1004	Williams	9000	1-Jan-2001	NULL	30	1007
1005	John	5000	1-Jan-2005	NULL	30	1006
1006	Dravid	19000	1-Jan-1985	2400	10	1007
1007	Martin	21000	1-Jan-2000	1040	NULL	NULL

1) Select employee details of dept number 10 or 30

```
SELECT * FROM Emp
WHERE DeptNo IN (10, 30);
```

2) Write a query to fetch all the dept details with more than 1 Employee.

```
SELECT DeptNo, Dname, Loc
FROM Dept
WHERE DeptNo IN (
   SELECT DeptNo
   FROM Emp
   GROUP BY DeptNo
   HAVING COUNT(*) > 1 );
```

3) Write a query to fetch employee details whose name starts with the letter “S”

```
SELECT * FROM Emp
WHERE Ename LIKE 'S%';
```

4) Select Emp Details Whose experience is more than 2 years

```
SELECT *
FROM Emp
WHERE DATEDIFF(CURDATE(), Hire_Date) > 730;
```

5) Write a SELECT statement to replace the char “a” with “#” in Employee Name (Ex: Sachin as S#chin)

```
SELECT REPLACE(Ename, 'a', '#') AS Modified_Name
FROM Emp;
```

6) Write a query to fetch employee name and his/her manager name.

```
SELECT E.Ename AS Employee_Name, M.Ename AS Manager_Name
FROM Emp E
LEFT JOIN Emp M ON E.Mgr = M.EmpNo;
```

7) Fetch Dept Name , Total Salry of the Dept

```
SELECT D.Dname AS Department_Name, SUM(E.Sal) AS Total_Salary
FROM Dept D
LEFT JOIN Emp E ON D.DeptNo = E.DeptNo
GROUP BY D.DeptNo;
```

8) Write a query to fetch ALL the employee details along with department name, department location, irrespective of employee existance in the department.

```
SELECT E.*, D.Dname AS Department_Name, D.Loc AS Department_Location
FROM Emp E, Dept D
WHERE E.DeptNo = D.DeptNo;
```

9) Write an update statement to increase the employee salary by 10 %

```
UPDATE Emp
SET Sal = Sal * 1.1;
```

10) Write a statement to delete employees belong to Chennai location.

```
DELETE FROM Emp
WHERE DeptNo = 30;
```

11) Get Employee Name and gross salary (sal + comission) .

```
SELECT Ename AS Employee_Name, Sal + IFNULL(Commission, 0) AS Gross_Salary
FROM Emp;
```

12) Increase the data length of the column Ename of Emp table from 100 to 250 using ALTER statement

```
ALTER TABLE Emp
MODIFY COLUMN Ename VARCHAR(250);
```

13) Write query to get current datetime

```
SELECT NOW();
```

14) Write a statement to create STUDENT table, with related 5 columns

```
CREATE TABLE STUDENT (
   StudentID INT PRIMARY KEY,
   FirstName VARCHAR(50),
   LastName VARCHAR(50),
   Age INT,
   GPA FLOAT
);
```

15) Write a query to fetch number of employees in who is getting salary more than 10000

```
SELECT COUNT(*) AS EmployeeCount
FROM Emp
WHERE Sal > 10000;
```

16) Write a query to fetch minimum salary, maximum salary and average salary from emp table.

```
SELECT MIN(Sal) AS MinSalary, MAX(Sal) AS MaxSalary, AVG(Sal) AS AvgSalary
FROM Emp;
```

17) Write a query to fetch number of employees in each location

```
SELECT D.Loc, COUNT(*) AS EmpCount
FROM Dept D
INNER JOIN Emp E ON D.DeptNo = E.DeptNo
GROUP BY D.Loc;
```

18) Write a query to display emplyee names in descending order

```
SELECT Ename
FROM Emp
ORDER BY Ename DESC;
```

19) Write a statement to create a new table(EMP_BKP) from the existing EMP table

```
CREATE TABLE EMP_BKP AS
SELECT * FROM Emp;
```

20) Write a query to fetch first 3 characters from employee name appended with salary.

```
SELECT CONCAT(LEFT(Ename, 3), Sal) AS NewCol
FROM Emp;
```

21) Get the details of the employees whose name starts with S

```
SELECT *
FROM Emp
WHERE Ename LIKE 'S%';
```

22) Get the details of the employees who works in Bangalore location

```
SELECT *
FROM Emp E
INNER JOIN Dept D ON E.DeptNo = D.DeptNo
WHERE D.Loc = 'Bangalore';
```

23) Write the query to get the employee details whose name started within any letter between A and K

```
SELECT *
FROM Emp
WHERE Ename REGEXP '^[A-K]';
```

24) Write a query in SQL to display the employees whose manager name is Stefen

```
SELECT E.*
FROM Emp E
INNER JOIN Emp M ON E.Mgr = M.EmpNo
WHERE M.Ename = 'Stefen';
```

25) Write a query in SQL to list the name of the managers who is having maximum number of employees working under him

```
SELECT M.Ename AS ManagerName, COUNT(*) AS EmployeeCount
FROM Emp M
LEFT JOIN Emp E ON M.EmpNo = E.Mgr
GROUP BY M.EmpNo
ORDER BY EmployeeCount DESC
LIMIT 1;
```

26) Write a query to display the employee details, department details and the manager details of the employee who has second highest salary

```
SELECT E.*, D.*, M.*
FROM Emp E
JOIN Dept D ON E.DeptNo = D.DeptNo
JOIN Emp M ON E.Mgr = M.EmpNo
ORDER BY E.Sal DESC
LIMIT 1 OFFSET 1;
```

27) Write a query to list all details of all the managers

```
SELECT E.*, D.Dname, D.Loc
FROM Emp E
LEFT JOIN Dept D ON E.DeptNo = D.DeptNo
WHERE E.EmpNo IN (
   SELECT DISTINCT Mgr
   FROM Emp );
```

28) Write a query to list the details and total experience of all the managers

```
SELECT E.*, D.Dname, D.Loc
FROM Emp E
LEFT JOIN Dept D ON E.DeptNo = D.DeptNo
WHERE E.EmpNo IN (
   SELECT DISTINCT Mgr
   FROM Emp
);
```

29) Write a query to list the employees who is manager and takes commission less than 1000 and works in Delhi

```
SELECT E.*
FROM Emp E
JOIN Dept D ON E.DeptNo = D.DeptNo
WHERE E.EmpNo = E.Mgr AND E.Commission < 1000 AND D.Loc = 'Delhi';
```

30) Write a query to display the details of employees who are senior to Martin

```
SELECT *
FROM Emp
WHERE Hire_Date < (SELECT Hire_Date FROM Emp WHERE Ename = 'Martin');
```