ASSIGNMENT 4 :SQL

**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**

**Ans:**

SELECT EmpNo , Ename,Sal,Commission,Hire\_date ,Mgr ,DeptNo from Emp JOIN Dept on Emp.DeptNo=Dept.DeptNo where DeptNo=10 or DeptNo=30;

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

**Ans:**

SELECT \* FROM Dept WHERE DeptNo=(SELECT DeptNo from Emp,Dept where Emp.DeptNo=Dept.DeptNo having count(DeptNo) >1);

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

**Ans:**

SELECT \* FROM Emp WHERE Ename like 'S%';

**4.Select Emp Details Whose experience is more than 2 years**

**Ans:**

SELECT \* FROM Emp WHERE EXTRACT(YEAR FROM age(CURRENT\_DATE(), Hire\_date)) > 2;

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

**Ans:**

SELECT replace (Ename,'a','#') from Emp;

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

**An**s:

SELECT E.Ename AS "Employee Name",M.Ename AS "Manager" FROM Emp E LEFT OUTER JOIN Emp M ON E.Mgr = M.EmpNo;

**7.Fetch Dept Name , Total Salry of the Dept**

**Ans:**

SELECT Dept.Dname, SUM(Sal) FROM Emp , dept where Emp.DeptNo =Dept.DeptNo GROUP BY Dept.DeptNo;

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

**Ans:**

SELECT \* from Emp ,Dept where M.DeptNo =Dept.DeptNo;

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

**Ans**:

UPDATE Emp SET Sal = Sal + (Sal \* 10/100);

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

**Ans:**

DELETE FROM Emp WHERE Emp.EmpNo=(SELECT Emp.EmpNo from Emp,Dept where Emp.DeptNo=Dept.DeptNo and Dept.Loc ='chennai') ;

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

**Ans:**

SELECT Ename, Sal, Commission,(Sal + ((Sal\*Commission) / 100)) as "total\_salary" from Emp;

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

**Ans:**

SELECT ALTER TABLE Emp modify Ename varchar(250);

**13.Write query to get current datetime**

**Ans:**

SELECT GetDate() AS 'CurrentDATETime';

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

**Ans:**

CREATE TABLE STUDENT (Student\_ID int,Student\_LastName varchar(255),Student\_FirstName varchar(255),Address varchar(255),City varchar(255));

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

**Ans:**

SELECT Ename, EmpNo FROM Emp WHERE Sal > 10000;

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

**Ans:**

SELECT MAX(Sal), MIN(Sal), AVG(Sal) FROM Emp;

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

**Ans:**

SELECT COUNT(EmpNo) FROM Emp,Dept where Emp.DeptNo =Dept.DeptNo GROUP BY Dept.Loc;

**18.Write a query to display emplyee names in descending order**

**Ans:**

SELECT \* from Emp order by Ename desc;

**19. Write a statement to create a new table(EMP\_BKP) from the existing EMPtable**

**Ans:**

CREATE TABLE EMP\_BKP AS SELECT Ename,EmpNo, Sal,Hire\_date,Commission,DeptNo,Mgr FROM Emp;

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

**Ans:**

SELECT SUBSTRING(Ename,1,3) ,Sal FROM Emp;

**21. Get the details of the employees whose name starts with S**

**Ans:**

SELECT \* FROM Emp WHERE Ename like 'S%';

**22. Get the details of the employees who works in Bangalore location**

Ans:

SELECT Emp.EmpNo from Emp,Dept where Emp.DeptNo =Dept.DeptNo and Dept.Loc ='Bangalore' ;

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

Ans:

SELECT \* FROM Emp WHERE Ename LIKE '[A-K]%';

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

Ans:

SELECT \* FROM Emp WHERE Mgr IN (SELECT EmpNo FROM Emp WHERE 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**

Ans:

SELECT M.Ename FROM Emp E,Emp M WHERE E.Mgr = M.EmpNo GROUP BY M.Mgr HAVING COUNT(\*)=(SELECT MAX(COUNT(Mgr)) FROM Emp GROUP BY Mgr);

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

**Ans:**

SELECT \* FROM Emp E , Dept D , Emp M WHERE E.Mgr = M.EmpNo and E.Deptno = D.Deptno and E.Sal<(SELECT MAX Sal from Emp) LIMIT 1;

**27. Write a query to list all details of all the managers**

**Ans:**

SELECT \* FROM Emp WHERE Empno IN (SELECT Mgr FROM Emp);

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

**Ans**:

SELECT DATEDIFF (YEAR(GetDate()),YEAR(Hire\_date)) AS Experience ,Ename,Empno ,Sal,commission,DeptNo,Mgr,Hire\_date FROM Emp WHERE Empno IN (SELECT Mgr FROM Emp);

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

**Ans:**

SELECT \* FROM Emp E, Dept D WHERE E.DeptNo=D.DeptNo AND E.Commission<1000 AND D.Loc ='Delhi';

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

**Ans:**

SELECT \* FROM Emp WHERE Hire\_date<(SELECT Hire\_date FROM Emp WHERE EmpNo=1007) ;