**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\_Table WHERE DeptNo=10 OR DeptNo=30;

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

-> SELECT dname ,COUNT(\*) FROM emp JOIN dept ON emp.deptno = dept.deptno GROUP BY dname HAVING COUNT(\*) > 1;

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

-> SELECT \* FROM Emp\_Table WHERE Ename LIKE ‘S%’;

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

-> SELECT \* FROM Emp\_Table WHERE EXTRACT (YEAR FROM AGE(NOW(),hire\_date))>2;

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

->UPDATE Emp\_Table set ename = REPLACE(ename, 'a', '#');

->SELECT Ename FROM Emp\_Table;

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

-> SELECT e1.ename, e2.ename as Manager\_Name FROM Emp\_Table as e1 JOIN Emp\_Table as e2 ON e1.mgr = e2.empno;

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

-> SELECT Dept\_Table.dname SUM(sal) FROM emp JOIN Dept\_Table ON Emp\_Table.deptno = DepT\_Table.deptno GROUP BY Dept\_Table .dname;

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

-> SELECT \* FROM Emp\_Table LEFT JOIN Dpt\_Table ON Emp\_Table.dpt\_id = Dept\_Table.id;

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

-> UPDATE Emp\_Table SET salary = salary + (salary \* 10 /100);

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

-> DELET FROM Empt\_Table where Empno IN (SELECT Empno FROM Emp\_Table JOIN Dept\_Table on Emp\_Table.Deptno = Dept\_Table.deptno WHERE Dept\_Table.deptno=30);

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

-> SELECT Ename, salary + COALESCE(Commision,0) AS GrossSalary from Emp\_Table;

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

-> ALTER TABLE Emp\_Tbale ALTER COLUMN Ename TYPE varchar(250);

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

-> SELECT NOW();

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

-> CREATE TABLE student (

id BIGSERIAL NOT NULL PRIMARY KEY,

first\_name VARCHAR(50) NOT NULL,

last\_name VARCHAR(50) NOT NULL,

gender VARCHAR(7) NOT NULL,

email VARCHAR(100),

date\_of\_birth DATE NOT NULL,

country\_of\_birth VARCHAR(50) NOT NULL,

);

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

-> SELECT COUNT(\*) FROM Emp\_Table WHERE salary>10000;

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

-> SELECT MIN(salary FROM Emp\_Table;

-> SELECT MAX(salary FROM Emp\_Table;

-> SELECT AVG(salary FROM Emp\_Table;

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

-> SELECT Dept\_Table.loc, COUNT(\*) FROM Emp\_TABLE LEFT JOIN Dept\_Table on Emp\_Table.deptno = Dept\_Table.deptno GROUP BY Dept\_Table.loc;

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

-> SELECT Ename FROM Emp\_Table ORDER BY DESC;

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

-> CREATE TABLE 'EMP\_BKP AS SELECT \* FROM 'EMP'

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

-> SELECT CONCAT(SUBSTRING(Ename,1,3),salary) FROM Emp\_Table;

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

-> SELECT \* FROM Empt\_Table WHERE Ename=’S%’;

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-> SELECT \* FROM Empt\_Table WHERE Ename LIKE ‘S%’;

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

->SELECT \* FROM Emp\_Table WHERE DeptNo=10;

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-> SELECT \* FROM Emp\_Table LEFT JOIN Dept\_Table ON Emp\_Table.deptno = Dept\_Table.deptno WHERE Dept\_Table.deptno = 10;

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

-> SELECT \* FROM Empt\_Table WHERE SUBSTRING(Ename,1,1)>=’A’ AND SUBSTRING(Ename,1,1)<=’K’;

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

-> SELECT **\*** FROM Emp\_Table WHERE mgr=(SELECT Empno from Emp\_table WHERE Empno =1003);

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

-> SELECT Emp\_Table.Ename as Managers , COUNT(\*) as Employee\_Count FROM Emp\_Table JOIN Emp\_Table on Emp\_Table.mgr =Emp\_Table.Empno GROUP BY Emp\_Table.Ename ORDER BY Employee\_Count desc;

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

-> SELECT Emp\_Table.Ename, Emp\_Table.sal, Emp\_Table.hire\_date, Emp\_Table.Commision, e2.Ename as Manager, d.dname FROM Emp\_Table LEFT JOIN Dept\_Table ON Dept\_Table.deptno = Emp\_Table.deptno LEFT JOIN

Emp\_Table as e2 ON Emp\_Table.mgr = e2.empno ORDER BY sal OFFSET 1 LIMIT 1;

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

-> SELECT e1.Ename as Manager,Emp\_Table.Ename as Employee\_Name FROM Emp\_Table JOIN Emp\_Table as e1 ON Emp\_Table.mgr=e1.empno;

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

-> Select Ename AS Manager, EXTRACT(YEAR FROM AGE(Now() ,Emp\_Table.hire\_date)) as Experience FROM Emp\_Table AS e1 ON Emp\_Table.mgr=e1.Empno;

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

-> SELECT Ename ,Commision FROM Emp\_Table JOIN Emp\_Table as e1 ON Emp\_Table.mgr=e1.empno JOIN ON Dept\_Table.deptno=v1.deptno WHERE Dept\_Table.deptno=20 AND e1.Commision<1000;

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

-> SELECT \* , EXTRACT(YEAR FROM AGE(NOW(),hire\_date)) AS Experience\_Year FROM Emp\_Table WHERE EXTRACT(YEAR FROM AGE(NOW(),hire\_date)) >(SELECT EXTRACT(YEAR FROM AGE(NOW(),hire\_date)) WHERE Empno=1007);