

Create a db called company consist of the following tables.

1. Emp (eno,ename, job,hiredate,salary,commission,deptno,)

2.dept(deptno,deptname,location)

eno is primary key in emp

deptno is primary key in dept

Solve Queries by SQL

1. List the maximum salary paid to salesman
2. List name of emp whose name start with 'I'
3. List details of emp who have joined before '30-sept-81'
4. List the emp details in the descending order of their basic salary
5. List of no. of emp & avg salary for emp in the dept no '20'
6. List the avg salary, minimum salary of the emp hiredatewise for dept no '10'.
7. List emp name and its department
8. List total salary paid to each department
9. List details of employee working in 'Dev' department
10. Update salary of all employees in deptno 10 by 5 %

Step 1: Create Database and Tables

1. Create Database

sql

Copy code

```
CREATE DATABASE company;
```

```
USE company;
```

2. Create Tables

sql

Copy code

```
-- Create dept table
```

```
CREATE TABLE dept (  
    deptno INT PRIMARY KEY,  
    deptname VARCHAR(100) NOT NULL,  
    location VARCHAR(100) NOT NULL  
);
```

```
-- Create Emp table
```

```
CREATE TABLE Emp (  
    eno INT PRIMARY KEY,  
    ename VARCHAR(100) NOT NULL,  
    job VARCHAR(50) NOT NULL,
```

```
hiredate DATE NOT NULL,  
salary DECIMAL(10, 2) CHECK (salary >= 0),  
commission DECIMAL(10, 2) CHECK (commission >= 0),  
deptno INT,  
FOREIGN KEY (deptno) REFERENCES dept(deptno)  
);
```

Step 2: Insert Sample Data

Here's an example of how to insert sample data into the tables:

sql

Copy code

```
-- Insert data into dept table
```

```
INSERT INTO dept (deptno, deptname, location) VALUES  
(10, 'HR', 'New York'),  
(20, 'Sales', 'Los Angeles'),  
(30, 'Dev', 'San Francisco');
```

```
-- Insert data into Emp table
```

```
INSERT INTO Emp (eno, ename, job, hiredate, salary, commission, deptno) VALUES  
(1, 'Alice', 'Manager', '1981-05-01', 70000, 5000, 10),  
(2, 'Bob', 'Salesman', '1980-02-15', 60000, 3000, 20),  
(3, 'Charlie', 'Salesman', '1982-03-20', 65000, 4000, 20),  
(4, 'David', 'Dev', '1983-08-25', 80000, 7000, 30),  
(5, 'Eve', 'Saleswoman', '1981-09-30', 55000, 2500, 20),  
(6, 'Frank', 'Analyst', '1980-11-11', 50000, NULL, 10),  
(7, 'Igor', 'Salesman', '1984-04-10', 58000, 2000, 20),  
(8, 'Hank', 'Dev', '1985-12-05', 75000, 8000, 30);
```

Step 3: Solve SQL Queries

1. List the maximum salary paid to salesman:

sql

Copy code

```
SELECT MAX(salary) AS MaxSalary
```

FROM Emp

WHERE job = 'Salesman';

2. List the name of emp whose name starts with 'I':

sql

Copy code

SELECT ename

FROM Emp

WHERE ename LIKE 'I%';

3. List details of emp who have joined before '30-sept-81':

sql

Copy code

SELECT *

FROM Emp

WHERE hiredate < '1981-09-30';

4. List the emp details in the descending order of their basic salary:

sql

Copy code

SELECT *

FROM Emp

ORDER BY salary DESC;

5. List of no. of emp & avg salary for emp in the dept no '20':

sql

Copy code

SELECT COUNT(*) AS NumberOfEmp, AVG(salary) AS AvgSalary

FROM Emp

WHERE deptno = 20;

6. List the avg salary, minimum salary of the emp hiredate wise for dept no '10':

sql

Copy code

SELECT hiredate, AVG(salary) AS AvgSalary, MIN(salary) AS MinSalary

FROM Emp

WHERE deptno = 10

GROUP BY hiredate;

7. List emp name and its department:

sql

Copy code

```
SELECT E.ename, D.deptname
```

```
FROM Emp E
```

```
JOIN dept D ON E.deptno = D.deptno;
```

8. List total salary paid to each department:

sql

Copy code

```
SELECT D.deptname, SUM(E.salary) AS TotalSalary
```

```
FROM Emp E
```

```
JOIN dept D ON E.deptno = D.deptno
```

```
GROUP BY D.deptname;
```

9. List details of employees working in 'Dev' department:

sql

Copy code

```
SELECT E.*
```

```
FROM Emp E
```

```
JOIN dept D ON E.deptno = D.deptno
```

```
WHERE D.deptname = 'Dev';
```

10. Update salary of all employees in deptno 10 by 5%:

sql

Copy code

```
UPDATE Emp
```

```
SET salary = salary * 1.05
```

```
WHERE deptno = 10;
```