**First create these two tables**

|  |  |
| --- | --- |
| **Employee** | |
| Empcode | Int |
| EmpFname | Varchar(20) |
| EmpLname | Varchar(20) |
| Job | Varchar(40) |
| Manager | Varchar(20) |
| HireDate | Date |
| Salary | Int |
| Commission | Int |
| DeptCode | Int |

|  |  |
| --- | --- |
| **Department** | |
| Deptcode | Int |
| DeptName | varchar(30) |
| Location | Varchar(40) |

2. Alter Department by adding primary key constraint to Deptcode.

3. Alter Department table add unique constraint to DeptName.

4. Alter Department table add constraint not null for location.

5. Alter Employee table by adding primary key constraint to Empcode.

6. Alter Employee table add foreign key constraint to deptcode

**Use the below query to insert the values to the tables:**

INSERT INTO DEPARTMENT VALUES (10, 'FINANCE', 'EDINBURGH'),

(20,'SOFTWARE','PADDINGTON'),

(30, 'SALES', 'MAIDSTONE'),

(40,'MARKETING', 'DARLINGTON'),

(50,'ADMIN', 'BIRMINGHAM');

INSERT INTO EMPLOYEE

VALUES (9369, 'TONY', 'STARK', 'SOFTWARE ENGINEER', 7902, '1980-12-17', 2800,0,20),

(9499, 'TIM', 'ADOLF', 'SALESMAN', 7698, '1981-02-20', 1600, 300,30),

(9566, 'KIM', 'JARVIS', 'MANAGER', 7839, '1981-04-02', 3570,0,20),

(9654, 'SAM', 'MILES', 'SALESMAN', 7698, '1981-09-28', 1250, 1400, 30),

(9782, 'KEVIN', 'HILL', 'MANAGER', 7839, '1981-06-09', 2940,0,10),

(9788, 'CONNIE', 'SMITH', 'ANALYST', 7566, '1982-12-09', 3000,0,20),

(9839, 'ALFRED', 'KINSLEY', 'PRESIDENT', 7566, '1981-11-17', 5000,0, 10),

(9844, 'PAUL', 'TIMOTHY', 'SALESMAN', 7698, '1981-09-08', 1500,0,30),

(9876, 'JOHN', 'ASGHAR', 'SOFTWARE ENGINEER', 7788, '1983-01-12',3100,0,20),

(9900, 'ROSE', 'SUMMERS', 'TECHNICAL LEAD', 7698, '1981-12-03', 2950,0, 20),

(9902, 'ANDREW', 'FAULKNER', 'ANAYLYST', 7566, '1981-12-03', 3000,0, 10),

(9934, 'KAREN', 'MATTHEWS', 'SOFTWARE ENGINEER', 7782, '1982-01-23', 3300,0,20),

(9591, 'WENDY', 'SHAWN', 'SALESMAN', 7698, '1981-02-22', 500,0,30),

(9698, 'BELLA', 'SWAN', 'MANAGER', 7839, '1981-05-01', 3420, 0,30),

(9777, 'MADII', 'HIMBURY', 'ANALYST', 7839, '1981-05-01', 2000, 200, NULL),

(9860, 'ATHENA', 'WILSON', 'ANALYST', 7839, '1992-06-21', 7000, 100, 50),

(9861, 'JENNIFER', 'HUETTE', 'ANALYST', 7839, '1996-07-01', 5000, 100, 50);

***Queries:***

1. Create a query that displays EMPFNAME, EMPLNAME, DEPTCODE, DEPTNAME, LOCATION from EMPLOYEE, and DEPARTMENT tables. Make sure the results are in ascending order based on the EMPFNAME and LOCATION of the department.
2. Display EMPFNAME and “TOTAL SALARY” for each employee
3. Display MAX and 2nd MAX SALARY from the EMPLOYEE table.
4. Display the TOTAL SALARY drawn by an analyst working in dept no 20
5. Compute the average, minimum, and maximum salaries of the group of employees having the job of ANALYST.
6. Query to find all departments that are located in Edinburgh:
7. Query to find all employees who work in the FINANCE department:
8. Query to find the average salary of employees in each department:
9. Query to find the top 10 highest-paid employees:
10. Query to find all employees who did not get a promotion in the last year:
11. Return a list of all employees who are paid above the average salary.
12. Return a list of all employees who have been with the company for more than 5 years.
13. Return a list of all departments, ordered by the number of employees in each department.
14. Return a list of all job titles, ordered by the number of employees in each job title.
15. Return a list of all managers, ordered by the number of employees managed by each manager.