

Lab 1: SQL Queries

Objective: To create tables with appropriate constraints and to insert data

Problem Description: Create the following tables with appropriate constraints and insert the given sample data.

Estimated time: 20 minutes

EMP

Column name	Data type	Description
EMPNO	Number	Employee number, Primary Key
ENAME	Varchar	Employee name
JOB	Char	Designation
MGR	Number	Manager's Emp. number
HIREDATE	Date	Date of joining
SAL	Number	Basic Salary
COMM	Number	Commission
DEPTNO	Number	Department Number, Foreign Key

DEPT

Column name	Data type	Description
DEPTNO	Number	Department number, Primary Key
DNAME	Varchar	Department name
LOC	Varchar	Location of department

Data for EMP

7369	Smith	Clerk	7902	17/12/80	800		20
7499	Allen	Salesman	7698	20/2/81	1600	300	30
7521	Ward	Salesman	7698	22/2/81	1250	500	30
7566	Jones	Manager	7839	2/4/81	2975		20
7654	Martin	Salesman	7698	28/9/81	1250	1400	30
7698	Blake	Manager	7839	1/5/81	2850		30
7782	Clark	Manager	7839	9/6/81	2450		10
7788	Scott	Analyst	7566	9/12/82	3000		20
7839	King	President		17/11/81	5000		10
7844	Turner	Salesman	7698	8/9/81	1500	0	30
7876	Adams	Clerk	7788	12/1/83	1100		20
7900	James	Clerk	7698	3/12/81	950		30

7902	Ford	Analyst	7566	4/12/81	3000		20
7934	Miller	Clerk	7782	23/1/82	1300		10

Data for DEPT table

10	Accounting	New York
20	Research	Dallas
30	Sales	Chicago
40	Operations	Boston

Perform the following queries

- a) List the names of analysts and salesmen.
- b) List details of employees who have joined before 30 Sep 81.
- c) List names of employees who are not managers.
- d) List the names of employees whose employee numbers are 7369, 7521, 7839, 7934, 7788.
- e) List employee names for those who have joined between 30 June and 31 Dec. '81.
- f) List the different designations in the company.
- g) List the names of employees who are not eligible for commission.
- h) List the employees not assigned to any department.
- i) List employees whose names either start or end with "S".
- j) List names of employees whose names have "i" as the second character.
- k) List the number of employees working with the company.
- l) List the maximum, minimum and average salary in the company.