

EXERCISE 3

Date: 26/08/2022

Create a table called EMP with the following structure.

Name	Type
EMPNO	INT (6)
EFNAME	VARCHAR (20)
ELNAME	VARCHAR (20)
JOB	VARCHAR (10)
DEPTNAME	VARCHAR (10)
DEPTNO	INT (2)
ECITY	VARCHAR (10)
SAL	INT (7,2)
WORKEXP	INT(10)
MANAGERNAME	VARCHAR (10)
MANAGERNO	INT (20)

Create dept table with the following structure.

Name	Type
DEPTNO	INT (2)
DNAME	VARCHAR (10)
LOC	VARCHAR (10)
LOCID	INT (5)

Q1. Write SQL queries to implement the following

1. Implement the above schema enforcing primary key and foreign key constraints and insert 5 records into the table.
2. Write a query to display the last name, department number, and department name for all employees.
3. Create a unique listing of all jobs that are in department 80. Include the location of the department in the output.
4. Write a query to display the employee last name, department name, location ID, and city of all employees who earn a commission.
5. Display the employee last name and department name for all employees who have an "a" (lowercase) in their last names.
6. Display the employee last name and employee number along with their manager's name and manager number.
7. Write a query to display the last name, job, department number, and department name for all employees who work in Toronto.
8. Modify the query 6 and display all employees including king, who has no manager and order the result by employee number.
9. Create a query that displays employee last names, department numbers, and all the employees who work in the same department as a given employee. Give each column an appropriate label.
10. Find the sum and average of salary from the EMP table
11. Find the employee who is having maximum year of experience.
12. Find the number of employees working.
13. Find the employee who is having very less work experience.
14. Find the employee who is getting very high salary.

Q2. Create given tables and perform JOIN operations on them

Create a table called STUDENT with the following structure.

Name	type
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Roll number	integer type
Name	character type
Address	character type
Phone	int type
Age	int type

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Create a table called StudentCourse with the following structure.

Name	type
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CourseId	integer type
Roll number	integer type

Perform given JOIN operations on the above tables.

- i. INNER JOIN
- ii. LEFT JOIN
- iii. RIGHT JOIN
- iv. FULL JOIN