Introduction to Database

Lab Manual Finalterm

American International University-Bangladesh

Lab 7 (Sub-query)

Exercise:

1. Display all the employees who are earning more than all the managers.
2. Display all the employees who are earning more than any of the managers.
3. Select employee number, job & salaries of all the Analysts who are earning more than any of the managers.
4. Select all the employees who work in DALLAS.
5. Select department name & location of all the employees working for CLARK.
6. Select all the departmental information for all the managers
7. Display the first maximum salary.
8. Display the second maximum salary.
9. Display the third maximum salary.
10. Display all the managers & clerks who work in Accounts and Marketing departments.
11. Display all the salesmen who are not located at DALLAS.
12. Get all the employees who work in the same departments as of SCOTT.
13. Select all the employees who are earning same as SMITH.
14. Display all the employees who are getting some commission in marketing department where the employees have joined only on weekdays.
15. Display all the employees who are getting more than the average salaries of all the employees.

Lab 8 (Joining: Displaying Data from Multiple Tables)

Exercise:

1. Display all the managers & clerks who work in Accounts and Marketing departments.
2. Display all the salesmen who are not located at DALLAS.
3. Select department name & location of all the employees working for CLARK.
4. Select all the departmental information for all the managers
5. Select all the employees who work in DALLAS.
6. Delete the records from the DEPT table that don't have matching records in EMP
7. Display all the departmental information for all the existing employees and if a department has no employees display it as "No employees".
8. Get all the matching & non-matching records from both the tables.
9. Get only the non-matching records from DEPT table (matching records shouldn't be selected).
10. Select all the employees name along with their manager names, and if an employee does not have a manager, display him as "CEO".
11. Get all the employees who work in the same departments as of SCOTT
12. Display all the employees who have joined before their managers.
13. List all the employees who are earning more than their managers.
14. Fetch all the employees who are earning same salaries.
15. Select all the employees who are earning same as SMITH.Display employee name , his date of joining, his manager name & his manager's date of joining.

Lab 9 (View)

Exercise

1. Create a view called **EMP_VU** based on the employee number, employee name, and department number from the EMP table. Change the heading for the employee name to EMPLOYEE.

2. Display the contents of the **EMP_VU** view.

EMPNO	EMPLOYEE	DEPTNO
7839	KING	10
7698	BLAKE	30
7782	CLARK	10
7566	JONES	20
7654	MARTIN	30
7499	ALLEN	30
7844	TURNER	30
7900	JAMES	30
7521	WARD	30
7902	FORD	20
7369	SMITH	20
7788	SCOTT	20
7876	ADAMS	20
7934	MILLER	10

3. using your view EMP_VU, enter a query to display all employee names and department numbers.

EMPLOYEE	DEPTNO
KING	10
BLAKE	30
CLARK	10

JONES 20

MARTIN 30

4. Create a view named **DEPT20** that contains the employee number, employee name, and department number for all employees in department 20. Label the view column EMPLOYEE_ID, EMPLOYEE, and DEPARTMENT_ID. Do not allow an employee to be reassigned to another department through the view.

5. Create a view called SALARY_VU based on the employee name, department name, salary, and salary grade for all employees. Label the columns Employee, Department, Salary, and Grade, respectively.

** Please save the SQL commands in a text file for further use.

Lab 10 (Sequence)

Exercise:

1. Create a sequence to be used with the primary key column of the DEPARTMENT table. The sequence should start at 60 and have a maximum value of 200. Have your sequence increment by ten numbers. Name the sequence DEPT_ID_SEQ.

2. Write a script to display the following information about your sequences: sequence name, maximum value, increment size, and last number.

3. Write an interactive script to insert a row into the DEPARTMENT table. Be sure to use the sequence that you created for the ID column. Create a customized prompt to enter the department name. Execute your script. Add two departments named Education and Administration. Confirm your additions.

Lab 11 (User Control Access)

Exercise:

Suppose you are the DBA for the following schemas. Complete the following task with appropriate sql command.

Employee

Eid	EName	Job	Supervisor	Sal	Did
E001	Asif	Manager	E009	20000.00	10
E002	Arif	Manager	E009	30000.00	10
E004	Abul	Salesman	E001	15000.00	20
E005	Kuddus	Salesman	E001	15000.00	20
E006	Maruf	Salesman	E003	15000.00	20
E009	Hasan	President		40000.00	10

Departments

Did	Name	Manager
10	Admin	E009
20	Sales	E002

Products

OrderID	ProductID	Quantity
O001	P001	10
O002	P001	10
O002	P003	10
O003	P002	10

OrderDetais

ProductID	PName	Price
P001	Machinery	50000.00
P002	Hardware	55000.00
P003	Software	65000.00

a) Create a user **Rahul** with the password **ret23erz.**

b) Create a new role **Accounts**.

c) Grant system privileges create table, view and sequence to role Accounts.

d) Assign role Accounts to Rahul.

e) Change password of **Rahul** with the new password **rec34tg**

f) Grant query privilege to Asif and Arif on Departments table.

g) Grant privilege update to column Price on OrderDetails table to role Manager and user Hasan.

h) Give Asif the authority to pass along update and insert privilege on Departments table.

Lab 12 (Project Presentation and Discussion)