**Bahria University, Lahore Campus**

Department of Computer Sciences

Lab Journal 08

**(Fall 2023)**

|  |  |  |
| --- | --- | --- |
| Course: | **Database Management System Lab** |  |
| Course Code: | CSL 220 | Max Marks: |
| Faculty’s Name: |  | Lab Engineer: |

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enroll No: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Subquery**

**Task 1**

Use the following Table Perform the following tasks

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISSION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |
|  |  |  |  |  |  |  |  |  |  |  |

1. Write a SQL query to find those employees who receive a higher salary than the employee with ID 163. Return first name, last name.
2. Write a SQL query to find out which employees have the same designation as the employee whose ID is 169. Return first name, last name, department ID and job ID.
3. Write a SQL query to find those employees whose salary matches the lowest salary of any of the departments. Return first name, last name and department ID.
4. Write a SQL query to find those employees who earn more than the average salary. Return employee ID, first name, last name.
5. Write a SQL query to find those employees who report to that manager whose first name is ‘Payam’. Return first name, last name, employee ID and salary.
6. Write a SQL query to find the employee whose salary is 3000 and reporting person’s ID is 121. Return all fields.
7. Write a SQL query to find all those employees who work in the Finance department. Return department ID, name (first), job ID and department name.

**Joins**

**Task 2**

Implement this database

create database JOINS

use joins

create table Employe\_Detail

(Emp\_id int primary key ,

Emp\_Name nvarchar(15),

Emp\_Salarty int ,

Dept\_id int foreign key references Department\_Detail (Dept\_id )

);

Create table Department\_Detail

(

Dept\_id int not null primary key ,

Dept\_Name nvarchar (15)

);

**Task 3**

Insert data

insert into Employe\_Detail values (1, 'abc',50000,1);

insert into Employe\_Detail values (2, 'abc',50000,2);

insert into Department\_Detail values (1,'CS'),(2,'BS'),(3,'EE'),(4,'IT'),(5,'BBA'),(6,'MBA')

select \* from Employe\_Detail

select \* from Department\_Detail

**Task 4**

Implement joins

select \* from Employe\_Detail

inner join Department\_Detail

on

Employe\_Detail.Emp\_id = Department\_Detail.dept\_id;

select \* from Employe\_Detail

left join Department\_Detail

on

Employe\_Detail.Emp\_id = Department\_Detail.dept\_id;

select \* from Employe\_Detail

right join Department\_Detail

on

Employe\_Detail.Emp\_id = Department\_Detail.dept\_id;

select \* from Employe\_Detail

full join Department\_Detail

on

Employe\_Detail.Emp\_id = Department\_Detail.dept\_id;

**Lab Grading Sheet :**

|  |  |  |  |
| --- | --- | --- | --- |
| **Task** | **Max Marks** | **Obtained Marks** | **Comments(*if any*)** |
| 1. | 10 |  |  |
| 2 | 10 |  |  |
| 3 | 10 |  |  |
| 4 | 10 |  |  |
| **Total** | **40** |  | **Signature** |

**Note : Attempt all tasks and get them checked by your Lab. Instructor**