

CSE311L

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Task -1

Creating database-

```
CREATE DATABASE company;
```

Table Creation-

```
CREATE TABLE Department (  
    DepartmentID INT PRIMARY KEY,  
    DepartmentName VARCHAR(100) NOT NULL  
);
```

```
CREATE TABLE Employee (  
    EmployeeID INT PRIMARY KEY,  
    FirstName VARCHAR(50) NOT NULL,  
    LastName VARCHAR(50) NOT NULL,  
    Salary DECIMAL(10,2) NOT NULL,  
    HireDate DATE NOT NULL,  
    DepartmentID INT,  
    ManagerID INT,  
    FOREIGN KEY (DepartmentID) REFERENCES Department(DepartmentID),  
    FOREIGN KEY (ManagerID) REFERENCES Employee(EmployeeID)  
);
```

1.Retrieve all columns from the Department table.

= SELECT * FROM Department;

2.Retrieve the first and last names of all employees in the Employee table.

= SELECT FirstName, LastName FROM Employee;

3.Display the last name and monthly salary of employees (assume Salary is the annual salary).

= SELECT LastName, Salary / 12 AS MonthlySalary FROM Employee;

4.Retrieve employees who have a salary greater than or equal to 5000.

= SELECT * FROM Employee WHERE Salary >= 5000;

5.Retrieve employees hired after '2021-01-01'.

= SELECT * FROM Employee WHERE HireDate > '2021-01-01';

7.Retrieve the first name, last name, and the annual salary of employees who earn more than 6000 annually. Use a column alias for the annual salary.

= SELECT FirstName, LastName, Salary AS AnnualSalary

FROM Employee

WHERE Salary > 6000;

8.Retrieve employees who work in departments 10 or 20, and order them by hire date.

= SELECT * FROM Employee

WHERE DepartmentID IN (10, 20)

ORDER BY HireDate;

9.Find all employees who were hired before 2019 and earn less than 5000.

= SELECT * FROM Employee

WHERE Hire_Date < '2019-01-01' AND Salary < 5000;

10.Find the employees whose salary is greater than the average salary of all employees.

= SELECT * FROM Employee

WHERE Salary > (SELECT AVG(Salary) FROM Employee);

11.Retrieve employees who have the same hire date as someone else in the company.

= SELECT * FROM Employee

WHERE HireDate IN (

SELECT HireDate

FROM Employee

GROUP BY HireDate

HAVING COUNT(*) > 1

);

12.Retrieve all employees who do not have a manager (assume *Manager_Id* is NULL if they have no manager

= SELECT * FROM Employee

WHERE ManagerID IS NULL;