

25. Exercises

Open SQL Server

Create a database as "HrSystem".

Select HrSystem database, run the below script in your database.

SQL Script:

```
CREATE TABLE Departments(  
    ID INT PRIMARY KEY,  
    Name VARCHAR(10) NOT NULL  
);  
  
CREATE TABLE Employees(  
    ID INT PRIMARY KEY,  
    Code VARCHAR(10) NOT NULL,  
    DepartmentID INT NULL,  
    Salary DECIMAL(12,2) NOT NULL,  
    IsActive BIT DEFAULT 1,  
    FOREIGN KEY (DepartmentId) REFERENCES Departments(Id)  
);  
  
INSERT Departments(ID, Name) VALUES(1, 'Production'), (2, 'HR')  
, (3, 'Marketing'), (4, 'IT'), (5, 'Accounting');  
  
INSERT Employees(ID, DepartmentId, Salary, IsActive) VALUES(1, '001', 1, 7000, 1)  
, (2, '002', 2, 8000, 1), (3, '003', 1, 8000, 0), (4, '004', NULL, 8000, 1)  
, (5, '005', 3, 9000, 1), (6, '006', NULL, 7000, 1);
```

Write SQL Queries for following questions using your database

Use Employee Code to identify an employee

1. Get **all employee** data
2. Get **all** records with **Employee Code** and **Salary** (Output should be **Employee Code** and **Salary**)
3. Get All departments
4. Get employees who have a salary greater than 7000
5. Get employees who have not allocated to a department
6. List employees who have left the company
7. List employees having a minimum of 8000 salary
8. Who is the latest employee
9. Who is the oldest employee

10. What is the minimum salary, maximum salary, average salary
11. Calculate monthly cost for salaries
12. Calculate total employees in each department
13. Calculate cost per each department
14. Which department having minimum employees
15. Which department having maximum employees
16. Calculate employees count in each department
17. What is the average employees of a department
18. How many employees working in the company
19. Write an SQL statement to add a new employee
20. Write an SQL statement to Update the last employee
21. Write an SQL statement to Add a new department
22. Write an SQL statement to Update the last department
23. Write an SQL statement to Delete the last employee
24. Write an SQL statement to Delete the last department
25. What department has a minimum of one employee