3. SQL Exercise - Views

CREATE TABLE Departments (

DepartmentID INT PRIMARY KEY,

DepartmentName VARCHAR(100) NOT NULL

);

CREATE TABLE Employees (

EmployeeID INT PRIMARY KEY,

FirstName VARCHAR(50) NOT NULL,

LastName VARCHAR(50) NOT NULL,

DepartmentID INT NOT NULL FOREIGN KEY REFERENCES Departments(DepartmentID),

Salary DECIMAL(10, 2) NOT NULL,

JoinDate DATE

);

INSERT INTO Departments (DepartmentID, DepartmentName) VALUES

(1, 'Engineering'),

(2, 'HR'),

(3, 'Marketing');

INSERT INTO Employees (EmployeeID, FirstName, LastName, DepartmentID, Salary, JoinDate) VALUES

(101, 'Alice', 'Smith', 1, 5000.00, '2022-01-10'),

(102, 'Bob', 'Brown', 2, 4000.00, '2021-12-15'),

(103, 'Charlie', 'Davis', 3, 4500.00, '2020-05-01');

CREATE VIEW vw\_EmployeeBasicInfo AS

SELECT

E.EmployeeID,

E.FirstName,

E.LastName,

D.DepartmentName

FROM Employees E

JOIN Departments D ON E.DepartmentID = D.DepartmentID;

CREATE VIEW vw\_EmployeeFullName AS

SELECT

EmployeeID,

FirstName,

LastName

FirstName + ' ' + LastName AS FullName

FROM Employees;

CREATE VIEW vw\_EmployeeAnnualSalary AS

SELECT

EmployeeID,

FirstName,

LastName,

Salary,

Salary \* 12 AS AnnualSalary

FROM Employees;

SELECT \* FROM vw\_EmployeeBasicInfo;

SELECT \* FROM vw\_EmployeeFullName;

SELECT \* FROM vw\_EmployeeAnnualSalary;

SELECT \* FROM vw\_EmployeeReport;

