

Task 7: Creating Views - SQL Code

```
-- Create the employees table
CREATE TABLE employees (
    emp_id INT PRIMARY KEY,
    name VARCHAR(50),
    department VARCHAR(50),
    salary DECIMAL(10,2)
);

-- Insert sample data
INSERT INTO employees VALUES
(1, 'Alice', 'Sales', 50000),
(2, 'Bob', 'HR', 45000),
(3, 'Charlie', 'Sales', 55000),
(4, 'David', 'IT', 60000);

-- View 1: Sales employees
CREATE VIEW sales_employees AS
SELECT emp_id, name, salary
FROM employees
WHERE department = 'Sales';

-- View 2: Department-wise average salary
CREATE VIEW department_salary_summary AS
SELECT department, AVG(salary) AS avg_salary
FROM employees
GROUP BY department;

-- View 3: HR employees with WITH CHECK OPTION
CREATE VIEW hr_employees AS
SELECT *
FROM employees
WHERE department = 'HR'
WITH CHECK OPTION;

-- Example: Use the views
SELECT * FROM sales_employees;
SELECT * FROM department_salary_summary;
SELECT * FROM hr_employees;

-- Example: Insert into hr_employees (this works)
INSERT INTO hr_employees VALUES (5, 'Eva', 'HR', 47000);

-- Example: Insert into hr_employees (this fails)
-- INSERT INTO hr_employees VALUES (6, 'Frank', 'Sales', 52000);

-- Drop a view example
-- DROP VIEW sales_employees;
```