

# Insert sample data into Tables

```
Create Database C21_DB1;
```

```
Go
```

```
Use C21_DB1;
```

```
-- Create the Departments Table
```

```
CREATE TABLE Departments (  
  DepartmentID INT PRIMARY KEY,  
  Name VARCHAR(50)  
);
```

```
-- Insert sample data into Departments
```

```
INSERT INTO Departments (DepartmentID, Name) VALUES (1, 'Human  
Resources');
```

```
INSERT INTO Departments (DepartmentID, Name) VALUES (2,
```

'Marketing');

INSERT INTO Departments (DepartmentID, Name) VALUES (3, 'Sales');

INSERT INTO Departments (DepartmentID, Name) VALUES (4, 'IT');

Go

--Create the Employees Table

CREATE TABLE Employees (

EmployeeID INT PRIMARY KEY,

Name VARCHAR(50),

DepartmentID INT,

HireDate DATE,

FOREIGN KEY (DepartmentID) REFERENCES

Departments(DepartmentID)

);

-- Insert sample data into Employees

```
INSERT INTO Employees (EmployeeID, Name, DepartmentID, HireDate)
VALUES (1, 'John Smith', 3, '2023-01-10');
```

```
INSERT INTO Employees (EmployeeID, Name, DepartmentID, HireDate)
VALUES (2, 'Jane Doe', 3, '2023-02-15');
```

```
INSERT INTO Employees (EmployeeID, Name, DepartmentID, HireDate)
VALUES (3, 'Emily Davis', 2, '2023-03-20');
```

```
INSERT INTO Employees (EmployeeID, Name, DepartmentID, HireDate)
VALUES (4, 'Michael Brown', 1, '2022-11-05');
```

```
INSERT INTO Employees (EmployeeID, Name, DepartmentID, HireDate)
VALUES (5, 'Sarah Miller', 4, '2023-01-05');
```

---

-- Step 1: Declare variables

```
DECLARE @DepartmentID INT; -- Variable for department ID
```

```
DECLARE @StartDate DATE; -- Variable for start date
```

```
DECLARE @EndDate DATE; -- Variable for end date
DECLARE @TotalEmployees INT; -- Variable to hold the total number of
employees
DECLARE @DepartmentName VARCHAR(50); -- Variable for department
name
```

-- Step 2: Initialize variables

```
SET @DepartmentID = 3; -- Assign a specific department ID
SET @StartDate = '2023-01-01'; -- Set start date for the report
SET @EndDate = '2023-12-31'; -- Set end date for the report
```

-- Step 3: Retrieve department name based on department ID

```
SELECT @DepartmentName = Name FROM Departments WHERE
DepartmentID = @DepartmentID;
```

-- Step 4: Calculate the total number of employees in the specified
department

```
SELECT @TotalEmployees = COUNT(*)
FROM Employees
WHERE DepartmentID = @DepartmentID
AND HireDate BETWEEN @StartDate AND @EndDate;

-- Step 5: Print the report
PRINT 'Department Report';
PRINT 'Department Name: ' + @DepartmentName;
PRINT 'Reporting Period: ' + CAST(@StartDate AS VARCHAR) + ' to ' +
CAST(@EndDate AS VARCHAR);
PRINT 'Total Employees Hired in ' + CAST(YEAR(@StartDate) AS
VARCHAR) + ': ' + CAST(@TotalEmployees AS VARCHAR);
```