Example 3 - Employee Attendance Tracking

-- This script generates an employee attendance report for a specified month and year.

-- It tracks the number of days present, absent, and on leave for a particular employee.

-- Declare variables

DECLARE @ReportMonth INT;

DECLARE @ReportYear INT;

DECLARE @TotalDays INT;

DECLARE @EmployeeID INT;

DECLARE @PresentDays INT;

DECLARE @AbsentDays INT;

DECLARE @LeaveDays INT;

```sql
-- Initialize variables
SET @ReportMonth = 7; -- Set the month for the report
SET @ReportYear = 2023; -- Set the year for the report
SET @EmployeeID = 101; -- Set the Employee ID for the report

-- Calculate total days in the month
SET @TotalDays = DAY(EOMONTH(DATEFROMPARTS(@ReportYear, @ReportMonth, 1)));

-- Calculate present, absent, and leave days
SELECT @PresentDays = COUNT(*)
FROM EmployeeAttendance
WHERE EmployeeID = @EmployeeID AND MONTH(AttendanceDate) = @ReportMonth AND YEAR(AttendanceDate) = @ReportYear AND Status = 'Present';

SELECT @AbsentDays = COUNT(*)
FROM EmployeeAttendance
```

```
WHERE EmployeeID = @EmployeeID AND MONTH(AttendanceDate) =
@ReportMonth AND YEAR(AttendanceDate) = @ReportYear AND Status =
'Absent';

SELECT @LeaveDays = COUNT(*)
FROM EmployeeAttendance
WHERE EmployeeID = @EmployeeID AND MONTH(AttendanceDate) =
@ReportMonth AND YEAR(AttendanceDate) = @ReportYear AND Status =
'Leave';

-- Print the report
PRINT 'Employee Attendance Report for Employee ID: ' +
CAST(@EmployeeID AS VARCHAR);
PRINT 'Report Month: ' + CAST(@ReportMonth AS VARCHAR) + '/' +
CAST(@ReportYear AS VARCHAR);
PRINT 'Total Working Days: ' + CAST(@TotalDays AS VARCHAR);
PRINT 'Days Present: ' + CAST(@PresentDays AS VARCHAR);
```

```
PRINT 'Days Absent: ' + CAST(@AbsentDays AS VARCHAR);
PRINT 'Days on Leave: ' + CAST(@LeaveDays AS VARCHAR);
```