**Lab 1: Get the Current Date and Time**

**Task:** Write a query to retrieve the current system date and time.

**Solution**

SELECT GETDATE() AS CurrentDateTime;

**Lab 2: Extract Year, Month, and Day from a Date**

**Task:** Extract the year, month, and day from the current date.

**Solution**

SELECT

YEAR(GETDATE()) AS YearPart,

MONTH(GETDATE()) AS MonthPart,

DAY(GETDATE()) AS DayPart;

**Lab 3: Add and Subtract Days from a Date**

**Task:** Add 10 days and subtract 5 days from the current date.

**Solution**

SELECT

DATEADD(DAY, 10, GETDATE()) AS DateAfter10Days,

DATEADD(DAY, -5, GETDATE()) AS DateBefore5Days;

**Lab 4: Find the Difference Between Two Dates**

**Task:** Calculate the difference in days between two given dates: '2025-01-01' and '2025-02-15'.

**Solution**

SELECT DATEDIFF(DAY, '2025-01-01', '2025-02-15') AS DaysDifference;

**Lab 5: Get the First and Last Day of the Current Month**

**Task:** Find the first and last day of the current month.

**Solution**

SELECT

DATEFROMPARTS(YEAR(GETDATE()), MONTH(GETDATE()), 1) AS FirstDayOfMonth,

EOMONTH(GETDATE()) AS LastDayOfMonth;

**Lab 6: Convert String to Date Format**

**Task:** Convert the string '25-Feb-2025' into a proper date format.

**Solution**

SELECT CAST('25-Feb-2025' AS DATE) AS ConvertedDate;

or

SELECT CONVERT(DATE, '25-Feb-2025', 113) AS ConvertedDate;

**Lab 7: Display Date in Different Formats**

**Task:** Convert the current date into different formats (YYYY-MM-DD, MM/DD/YYYY, DD Mon YYYY).

**Solution**

SELECT

CONVERT(VARCHAR, GETDATE(), 23) AS Format1, -- YYYY-MM-DD

CONVERT(VARCHAR, GETDATE(), 101) AS Format2, -- MM/DD/YYYY

CONVERT(VARCHAR, GETDATE(), 106) AS Format3; -- DD Mon YYYY

**Lab 8: Get the Weekday of a Given Date**

**Task:** Find the day of the week for '2025-02-26'.

**Solution**

SELECT DATENAME(WEEKDAY, '2025-02-26') AS WeekdayName;

**Lab 9: Get the Start of the Week for a Given Date**

**Task:** Find the Monday of the current week.

**Solution**

SELECT DATEADD(DAY, - (DATEPART(WEEKDAY, GETDATE()) - 2), GETDATE()) AS StartOfWeek;

**Lab 10: Get the Age from Date of Birth**

**Task:** Calculate the age of a person born on '1995-05-15'.

**Solution**

SELECT DATEDIFF(YEAR, '1995-05-15', GETDATE()) -

CASE

WHEN (MONTH(GETDATE()) < MONTH('1995-05-15')) OR

(MONTH(GETDATE()) = MONTH('1995-05-15') AND DAY(GETDATE()) < DAY('1995-05-15'))

THEN 1

ELSE 0

END AS Age;