

EXERCISE 5

DATE FUNCTIONS.

1 Add 6 months to each employees hired date using
DATEADD

Select emp_id,
name,
hire_date

DATEADD(month, 6, hire_date) AS hire_plus_6_months

emp_id	name	hire_date	hire-plus-6-months
1	Alice	2020-01-15	2020-07-15
2	Bob	2021-06-10	2021-12-10
3	Charlie	2023-03-22	2023-09-22

2 Use DATEDIFF() to find age days from dob to get today.

Select student_id,
name,

DAYIFF(DAY, '2005-08-10', '2025-10-10') AS age_in_days
FROM Students

Student_id	Name	age_in_days
101	Maya	20
102	Ethan	21
103	Sienna	19

4 Calculate the number of days between issue_date and due_date.

SELECT invoice_id,
issue_date,
due_date

DAYOFF(DAY, issue_date, due_date) AS days_between
FROM Invoice;

invoice_id	issue_date	due_date	days_Between
501	2025-03-01	2025-03-25	15
502	2025-04-01	2025-04-15	14
503	2025-04-10	2025-04-20	10

5 Format Start_date as 'Month YYYY' Using TO-CHAR()

SELECT course_id,
name

TO-CHAR(Start_date, 'Month YYYY') AS formated_date
FROM Courses;

Course_id	Name	Formated-date
201	SQL Basics	May 2025
202	Python	June 2025

6 Create full date parts using DATE_FROM_PARTS()

SELECT member_id,

DATE_FROM_PARTS(Start-Year, Start-Month, Start-Day)
AS Full-Start-Day

FROM Membership;

member_id	full_start_date
1	2023-05-10
2	2022-11-25

7) Extend each renewal_date by 1 year using DATEADD

SELECT sub_id,
plan,

DATEADD(year, 1, renewal_date) AS extended_renewal_date
FROM Subscriptions;

Sub_id	Plan	extended_renewal_date
11	Basic	2026-01-01
12	Premium	2026-03-05.

8) Show current date and difference from order_date. Use CURRENT_DATE and DATEDIFF

SELECT order_id,
order_date

CURRENT_DATE AS today_date,

DATEDIFF(DAY, order_date, CURRENT_DATE) AS days_since_order
FROM Orders.

Order_Id	Order-date	today-date	days_since_order
1001	2025-04-15	2025-10-11	179
1002	2025-04-10	2025-10-11	184

9. Extract the year from training-date using DATE-PART() or EXTRACT

SELECT training_id,
topic,

EXTRACT(year from training-date) AS training-year
From Training;

training_id	topic	training-year
1	safety	2025
2	Compliance	2025

10 Extract hour and minute from published_on

SELECT

post_id,
title,

EXTRACT(hour from published_on) AS hour_published

EXTRACT(minute from published_on) AS minute_published

Post_id	Title	h_published	m_published
1	SOC 1	10	15
2	DATA C	16	45

11. Calculate days left until license expiry using DATEDIFF() and today - date

Select driver_id,
license_expiry,

DATEDIFF(day, CURRENT_DATE, license_expiry) AS days_left
FROM Drivers;

Drivers_id	License_expiring	days_left
301	2025-08-10	-62
302	2023-12-31	-284

12 Display the current timestamp and calculate seconds since the message was sent

Select message_id,

Sent_timestamp,

CURRENT_TIMESTAMP AS current_timestamp,

DATEDIFF(Second, Sent_timestamp, CURRENT_TIMESTAMP) AS Seconds

message_id	Sent_timestamp	Current_timestamp
1	2025-04-11 09:32:45	2025-10-11 21:44:06

13) Add 15 days to return_date using DATEADD() to show restock_date

SELECT return_id,
return_date,
DATEADD(day, 15, return_date)
From Returns;

return_id	return_date	restock_date
901	2025-04-05	2025-04-20
902	2025-04-01	2025-04-16

14) Convert assigned_on to date using TO_DATE() (if is stored as a string).

SELECT assigned_id,
TO_DATE(assigned_on, 'YYYY-MM-DD') AS assigned_on_date
From Assignment;

assign_id	assigned_on_date
1	2025-03-01
2	2025-03-05