

Exercise 5: DATE FUNCTIONS

1. SELECT emp-id,
name,
hire-date

DATEADD (hire-date, 6, 'months') (MONTH, 6, hire-date) AS hire-plus-6-months
FROM Employees;

emp-id	name	hire-plus-6-months
1	Alice	2020-07-15
2	Bob	2021-12-10
3	Charlie	2023-09-22

2. SELECT *
DATEIFF(^{DAY} days, dob, 'CURRENT-DATE') AS age-in-days
FROM Students;

Student-id	name	age-in-days
101	Maya	7405
102	Ethan	7661
103	Sienna	7159

3. SELECT event-id,
event-name,
DATEIFF(^{DAY} days, 'CURRENT-DATE', event-date) AS days-remaining
FROM Events;

event-id	event-name	days-remaining
1	Seminar	-483
2	Workshop	-39
3	Hackathon	-263

4. SELECT *
DATEIFF(^{DAY} days, issue-date, due-date) AS days-between
FROM Invoices;

invoice-id	issue-date	due-date	days-between
501	2025-03-10	2025-03-25	15
502	2025-04-01	2025-04-15	14
503	2025-04-01	2025-04-20	10

5. SELECT course-id,
name,
TO_CHAR (start-date, 'FMMonth YYYY') AS formatted-date
FROM Courses;

course-id	name	formatted-date
201	SQL	May 2025
202	Python	June 2024

6. SELECT member-id,
^{DATEFROMPARTS} DATE_FROM_PARTS (start-year, start-month, start-day) AS full-start-date
FROM memberships;

member-id	full start-date
1	2023-05-10
2	2022-11-25

7. SELECT sub-id,
plan,
DATEADD (^{extended} YEAR, 1, renewal-date) AS ^renewal-date
FROM Subscriptions;

Sub-id	plan	extended-renewal-date
11	Basic	2024-01-01
12	Premium	2024-03-15

SELECT ~~order-id~~,
order-date

CURRENT_DATE AS today-date
DATE DIFF (^{DAY} ~~CURRENT_DATE~~, ~~order-date~~, ~~CURRENT_DATE~~) AS days-since-order
FROM Orders;

order-id	order-date	today-date	days-since-order
1001	2025-04-15	2025-10-10	178
1002	2025-04-10	2025-10-10	183

1. SELECT training-id,
topic,
EXTRACT (Year FROM training-date) AS training-year
FROM Trainings;

training-id	topic	training-year
1	Safety	2025
2	Compliance	2025

10. SELECT post-id,
title,
EXTRACT (Hour FROM published-on) AS hour-published
EXTRACT (Minute FROM published-on) AS minute-published
FROM Blog-Posts;

Post-id	title	hour-published	minute-published
1	SQL Tips	10	15
2	Data cleaning	16	45

11. SELECT *
^{DAY} DATEDIFF (days, ~~CURRENT_DATE~~, license-expiry) AS days-left
FROM Drivers;

drivers-id	license-expiry	days-left
301	2025-08-10	-61
302	2023-12-31	-648

12. SELECT *
CURRENT_TIMESTAMP AS current-timestamp
^{SECOND} DATEDIFF (seconds, sent-timestamp, ~~CURRENT_TIMESTAMP~~) AS seconds-since-sent
FROM Messages;

message-id	sent-timestamp	current-timestamp	seconds-since-sent
1	2025-04-19 09:32:45	2025-10-10 12:00:00	15223633
2	2025-04-18 23:59:69	2025-10-10 12:00:00	15294479

SELECT *
 DATEADD(^{DAY}days, 15, return_date) AS restock_date
 FROM Returns;

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

SELECT assign_id,
 TO_DATE (assigned_on, 'YYYY-MM-DD') AS assigned_on_date
 FROM Assignments;

Assign-id	Assigned-on-date
1	2025-03-10
2	2025-03-05

15. SELECT meeting_id,
 TO_CHAR (scheduled_time, 'FullMonth ^{DAY}DAY, YYYY "at" HH:MM ^{MI}PM ^{AM}PM') AS
 formatted_meeting_time
 FROM Meetings;

meeting-id	formatted-meeting-time
1	April, 19 2025 at 2:00 PM
2	April, 19 2025 at 9:30 AM