

## EXERCISE 5: DATE FUNCTIONS

Question 1: Add 6 month to each employee's hire date  
using DATEADD()

```
SELECT Emp_id, Name,  
       Hire_date,  
       DATEADD(Month, 6, 'Hire_date')  
       AS Hire_plus_6_months  
FROM Employees;
```

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

Question 2: Use DATEDIFF() to find age in days  
from dob to today

```
SELECT Student_id, Name,  
       DATEDIFF(Day, 'Dob', Current_date)  
       AS Age_in_days  
FROM Students;
```

Student_id	Name	Age in days
101	Mayer	7376
102	Ethan	7624
103	Sienna	7179

Question 3 : Find how many days are left untill each event using DATEDIFF

```
SELECT Event_id, Event_name,  
       ABS(DATEDIFF(Days, 'Event_date', Current_date))  
       AS Days remaining  
FROM Events;
```

Event_id	Event_name	Days Remaining
1	Seminar	492
2	Workshop	-49
3	Hackathon	273

Question 4 : Calculate the number of days between Issue date & Due-date

```
SELECT Invoice_id, Issue_date,  
       Due_date,  
       DATE DIFF (Days, 'Issue_date', 'Due_date')  
       AS Days_Between  
FROM Invoice;
```

Invoice_id	Issue_date	Due date	Days between
S01	2025-03-10	2025-03-25	15
S02	2025-04-01	2025-04-15	14
S03	2025-04-10	2025-04-20	10



Question 5 : Format start\_date as 'Month\_YYYY' using  
to\_char

```
SELECT Course_id, Name,  
       to_char (start_date, 'MM-YYYY')  
       AS Formatted date  
FROM Courses;
```

Course_id	Name	Formatted date
201	SQL Basics	05-2025
202	PYTHON	06-2025

Question 6 : Create full date from parts Using  
DATE\_FROM\_Parts()

```
SELECT Member_id,  
       DATEFROMPARTS (start_year, start_month, start_day)  
       AS full_date  
FROM Memberships;
```

Member_id	Full date
1	2023-05-10
2	2022-11-25

Question 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	2026-03-15

Question 8 Show Current date & Difference From Order date Use Current date & Datediff

```
SELECT Order-id, Order-date,
       Current-date AS Today-Date,
       DATEDIFF (Days, 'Order-date', 'Today-date')
       AS Days-since-Order
FROM Orders;
```

Order id	Order date	Today Date	Days Since Order
1001	2025-04-15	2025-10-18	187
1002	2025-04-10	2025-10-18	192

Question 9 Extract the year from training date Using (Year, 'Training date') (Date Part())

```
SELECT Training-id, Topic,
       Extract (Year, 'Training date')
       AS Training Year
FROM Trainings;
```

Training id	Topic	Training Year
1	Safety	2025
2	Compliance	2025



Question 10: Extract hour & minute from published on

```
SELECT Post_id, Title,  
       Extract (hour, 'Published on')  
       AS hour_published_on,  
       Extract (Minutes, 'Published on')  
       AS Minutes_published_on
```

From Blog\_posts;

Post_id	Title	hour published on	Minutes Published on
1	SQL Tips	10	15
2	Data Cleaning	16	45

Question 11: Calculate days left Untill license expiry  
Using datediff & Today date.

```
SELECT Driver_id, License_expiry,  
       ABS(DATEDIFF (Day, 'License_expiry', 'Current-date'))  
       AS Days_left
```

Driver_id	License_expiry	Days left
301	2025-08-10	70
302	2023-12-31	659

Question 12: Display Current timestamp & Calculate Seconds  
Since the message was sent

```
SELECT Message_id, Sent_timestamp, Current_timestamp,  
       Timediff (Seconds, 'Sent_timestamp', 'Current_timestamp')  
       AS Second_since Sent  
From Messages;
```

Message_id	Sent timestamp	Current timestamp	Second Since
1	2025-06-19 09:32:45	2025-10-18	15907639
2	2025-04-18 23:57:59	2025-10-18	1600805

Question 13 : Add 15 days to return date using  
DATEADD() to show restock date.

```
SELECT Return_id, Return_date
      DATEADD(Days, 15, 'Return_date')
      AS Restock_date
FROM Returns;
```

Return id	Returndate	Restock date
901	2025-04-05	2025-04-20
902	2025-04-01	2025-04-16

Question 14 : Convert assigned on to date using to\_date  
if it's stored as a string

```
SELECT Assign_id,
      TO_DATE(Assigned on, 'YYYY-MM-DD')
      AS Assigned_on_date
FROM Assignments;
```

Assign id	Assigned on date
1	2025-03-01
2	2025-03-05



Question 15 : Convert Scheduled time to formatted  
String like April 19, 2025 at 2:00 Pm  
Using To\_CHAR()

```
SELECT Meeting_id,  
       To_CHAR ( Scheduled_Time, MM-DD-YYYY  
                HH:MM ) AS  
       Formatted_Meeting_time  
FROM Meetings;
```

Meeting id	Formatted Meeting time
1	April 19 2025 2:00 pm
2	April 19, 2025 9:30 Am