

Homework

Exercise: DATE Functions

11 October 2025

Question 1

Add 6 months to each employee's hire date using **DATEADD()**.

```
SELECT emp_id,
       name,
       hire_date
       DATEADD(month, 6, hire_date) AS hire_plus
FROM employees;
```

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

Question 2

Use **DATEDIFF()** to find age in days from dob to date.

```
SELECT student_id,
       name,
       DATEDIFF(day, dob, '2025-10-10') AS age_in
FROM students;
Used 2025-10-11
```

days

Student-id	name	dob	age-in-days
101	Maya	2005-08-10	7367
102	Ethan	2004-12-01	7619
103	Sienna	2006-03-15	7150

Question 3

Find how many days are left until each event using DATEDIFF()

```
SELECT event_id,
       event_name,
```

```
DATEDIFF(day, event_date, '2025-10-11') AS days_left
FROM Events;
```

event_id	event_name	days-remaining
1	Seminar	544
2	Workshop	40
3	Hackathon	263

Question 4

Calculate the name of days between issue_date and due_date.

```
SELECT invoice_id,
       issue_date,
       due_date,
```

```
DATEDIFF(day, issue_date, due_date) AS days_between
FROM invoices;
```

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, 'Month YYYY') AS formatted_date`

`FROM courses;`

course_id	name	formatted_date
201	SQL Basics	May 2025
202	Python	June 2025

Question 6

Create full date from parts using **DATEFROMPARTS**

`SELECT member_id,`

`DATEFROMPARTS(start-year, start-month, start-day)`

`AS full_start_date`

`FROM Members;`

member_id	full_start_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 and difference from order_date.

Use CURRENT_DATE and DATEDIFF()

```
SELECT order_id,
       order_date,
       CURRENT_DATE(order_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
101	2025-04-15	2025-10-11	179
102	2025-04-10	2025-10-11	184

Question 9

Extract the year from training_date using
DATE_PART or **EXTRACT**

```
SELECT training_id,
       topic,
       DATEPART(YEAR, training_date) AS training_year
  FROM Training;
```

training_id	topic	training year
1	Safety	2025
2	Compliance	2025

Question 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
  FROM Blog_Posts;
```

post_id	title	hour_published	minute_published
1	SQL Tips	10	15
10	Data Cleaning	16	45

Question 11

Calculate days left until license expiry date
DATEIFFY and today's date.

```
SELECT driver_id,
       license_expiry,
       DATEDIFF(days, '2025-10-11', license_expiry)
             AS days_left
  FROM drivers;
```

driver_id	license_expiry	days left
301	2025-08-10	-62
302	2023-12-31	-650

Question 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_since_sent
  FROM FTR_Messages;
```

message_id	sent_timestamp	current_timestamp	seconds_since_sent
1	2025-04-19 2025-04-18 23:59:59	2025-10-11 02:02:35	15179389
2		2025-10-11 02:02:35	15213785

Question 13

Add 15 day to return_date using **DATEADD()**,
to show restock date

```
SELECT return_id,
       return_date
    DATEADD(day, 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

Question 14

Convert assigned_on the date using **TO_DATE()**.
(If it's stored in string)

```
SELECT assign_id,
       TO_DATE(assign_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-time(Scheduled-time),
ype at HH:MM)

As formatted-meeting time

From
meetings:

Meeting-id	formatted_meeting_time
1	April 19, 2025 at 2:00 PM
2	April 19, 2025 at 09:30 AM