

Exercise 5: Date Functions

Q1 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

Q2 Select student_id, name, dateDiff (day, dob, getdate ()) as age from students
 from students

Student_id	Name	dob	age in days
101	Maya	2005-08-10	7380
102	Ethan	2004-12-01	7626
103	Gienna	2008-03-15	7137

Q3. Select event_id, event_name, dateDiff (day, select event_id, event_name, current date dateDiff (day, event_date, current date) as days remaining

Event_id	event_name	days remaining
1	Seminar	-485
2	Workshop	-42
3	Hackathon	-266

Q4 Select invoice_id, issue_date, due_date
~~date_diff(day, 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	2025-04-10	2025-04-20	10

Q5 Select course_id, name, To_char (start_date,
 'Month YYYY') as formatted date
 From courses

course_id	Name	startdate	Formatted date
201	SQL basics	2025-05-01	May 2025
202	Python	2025-06-01	June 2025

Q6. Select member_id, Date from parts (start-day, start-month, start year) as full start date

Member id	Full start date
1	10 - 5 - 2023
2	25 - 11 - 2022

Q7 Select sub_id, plan,
 date add (Year, 1, renewal_date) as extended
 renewal date

sub_id	plan	extended renewal date
11	Basic	2026-01-01
12	Premium	2026-03-15

Q8 ~~Select order_id, current_date~~
 Q8 Select order_id, order_date, current_date
 (1) as today_date
~~Date~~ DateDiff (Day, order_date, Current_date)
 as days since order
 From orders

Order id	order_date	today_date	days since order
1001	2025-04-01	2025-10-13	181
1002	2025-04-10	2025-10-13	186

Q9 Select training_id, topic, extract (Year from
 training_date) as training_year
 From trainings;

training_id	topic	training_date	training_year
1	Safety	2025-01-10	2025
2	Compliance	2025-02-20	2025

Q10. Select post_id, title, Extract (hour from
 published on) as hour_published, extract
 (minutes from published on) as minute_published
 From Blog Posts

Post_id	Title	hour_published	minute_published
1	SQL tips	10	15

q11 Select driver_id, licence_expiry, current_date
 Date diff (Day, licence_expiry, current_date)
 as days_left
~~from~~ drivers

Driver_id	licence_expiry	days_left
301	2025-08-10	-54
302	2023-12-31	-652

Assume today's date is 13 Oct 2025

2 Select message_id, sent_timestamp, current_timestamp as current_timestamp,
 Date Diff (Second, sent_timestamp, current_timestamp) as seconds_since_sent
 from messages;

Message_id	Sent_timestamp	Current_timestamp	Seconds since sent
1	2025-04-19	2025-10-13	
2	09:32:45	00:00:00	
2	2025-04-18	2025-10-13	
	23:59:59	00:00:00	

Select return_id, return_date
 Add (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

Q14 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

Q15 Select meeting_id, To_char (scheduled_time,
 Month DD, YYYY "at",

Meeting id	Scheduled at time	formatted_meeting_time
1	2025-04-19	April 19 2025 at 2:00
2	14:00:00	PM
2	2025-04-19 09:30:00	April 19, 2025 at 9:30 AM