

Oracle

Data Types

Type	Stores
DATE	Date and time, to the second (no fractional seconds)
TIMESTAMP	Date and time, with fractional seconds
TIMESTAMP WITH TIME ZONE	Timestamp plus a UTC offset
TIMESTAMP WITH LOCAL TIME ZONE	Timestamp normalised to the database's time zone on storage

Note: DATE data type stores date and time.

Common Tasks

Task	Function	Example
Current date and time	<code>SYSDATE</code>	<code>SELECT SYSDATE FROM dual;</code>
Current timestamp (with time zone)	<code>SYSTIMESTAMP</code>	<code>SELECT SYSTIMESTAMP FROM dual;</code>
Extract year / month / day	<code>EXTRACT()</code>	<code>EXTRACT(YEAR FROM order_date)</code>
Add days	<code>+</code>	<code>order_date + 7</code>
Add months	<code>ADD_MONTHS()</code>	<code>ADD_MONTHS(order_date, 1)</code>
Subtract an interval	<code>- INTERVAL</code>	<code>order_date - INTERVAL '7' DAY</code>
Difference in days	<code>-</code>	<code>ship_date - order_date</code>
Difference in months	<code>MONTHS_BETWEEN()</code>	<code>MONTHS_BETWEEN(ship_date, order_date)</code>
Format date as text	<code>TO_CHAR()</code>	<code>TO_CHAR(order_date, 'YYYY-MM-DD')</code>
Convert text to date	<code>TO_DATE()</code>	<code>TO_DATE('2026-09-23', 'YYYY-MM-DD')</code>
Convert text to timestamp	<code>TO_TIMESTAMP()</code>	<code>TO_TIMESTAMP('2026-09-23 10:00:00', 'YYYY-MM-DD HH24:MI:SS')</code>

SQL Server

Data Types

Type	Stores
DATE	Date and time, to the second (no fractional seconds)
TIMESTAMP	Date and time, with fractional seconds
TIMESTAMP WITH TIME ZONE	Timestamp plus a UTC offset
TIMESTAMP WITH LOCAL TIME ZONE	Timestamp normalised to the database's time zone on storage

Common Tasks

Task	Function	Example
Current date and time	GETDATE()	SELECT GETDATE();
Current date and time (higher precision)	SYSDATETIME()	SELECT SYSDATETIME();
Current UTC date and time	GETUTCDATE()	SELECT GETUTCDATE();
Extract year / month / day	YEAR(), MONTH(), DAY()	YEAR(order_date)
Add days	DATEADD()	DATEADD(day, 7, order_date)
Add months	DATEADD()	DATEADD(month, 1, order_date)
Subtract days	DATEADD() with negative number	DATEADD(day, -7, order_date)
Difference between two dates	DATEDIFF()	DATEDIFF(day, order_date, ship_date)
Format date as text	FORMAT()	FORMAT(order_date, 'yyyy-MM-dd')
Convert text to date	CAST() or CONVERT()	CAST('2026-09-23' AS date)
Safely convert text to date	TRY_CONVERT()	TRY_CONVERT(date, '2026-09-23')

MySQL

Data Types

Type	Stores
DATE	Date only
TIME	Time only
DATETIME	Date and time, stored as entered, no time zone conversion
TIMESTAMP	Date and time, stored in UTC, converted based on session time zone
YEAR	A 4-digit year

Common Tasks

Task	Function	Example
Current date and time	NOW()	SELECT NOW();
Current date only	CURDATE()	SELECT CURDATE();
Current time only	CURTIME()	SELECT CURTIME();
Extract year / month / day	YEAR(), MONTH(), DAY()	YEAR(order_date)
Add days	DATE_ADD()	DATE_ADD(order_date, INTERVAL 7 DAY)
Add months	DATE_ADD()	DATE_ADD(order_date, INTERVAL 1 MONTH)
Subtract days	DATE_SUB()	DATE_SUB(order_date, INTERVAL 7 DAY)
Difference in days	DATEDIFF()	DATEDIFF(ship_date, order_date)
Difference in other units	TIMESTAMPDIFF()	TIMESTAMPDIFF(HOUR, order_date, ship_date)
Format date as text	DATE_FORMAT()	DATE_FORMAT(order_date, '%Y-%m-%d')
Convert text to date	STR_TO_DATE()	STR_TO_DATE('2026-09-23', '%Y-%m-%d')

PostgreSQL

Data Types

Type	Stores
DATE	Date only
TIME	Time only
TIMESTAMP	Date and time, no time zone
TIMESTAMPTZ (TIMESTAMP WITH TIME ZONE)	Date and time, stored in UTC, converted to session time zone on display
INTERVAL	A span of time (e.g. '3 days', '2 hours')

Common Tasks

Task	Function	Example
Current timestamp (with time zone)	NOW()	SELECT NOW();
Current date only	CURRENT_DATE	SELECT CURRENT_DATE;
Current time only	CURRENT_TIME	SELECT CURRENT_TIME;
Extract year / month / day	EXTRACT()	EXTRACT(YEAR FROM order_date)
Add days	+ INTERVAL	order_date + INTERVAL '7 days'
Add months	+ INTERVAL	order_date + INTERVAL '1 month'
Subtract days	- INTERVAL	order_date - INTERVAL '7 days'
Difference between two dates	-	ship_date - order_date
Human-readable difference	AGE()	AGE(ship_date, order_date)
Format date as text	TO_CHAR()	TO_CHAR(order_date, 'YYYY-MM-DD')
Convert text to date	::date or TO_DATE()	'2026-09-23'::date