

MySQL Predefined Functions & Clauses with Examples

Function / Clause	Definition	Example
CURDATE()	Returns the current date.	SELECT CURDATE(); → 2025-10-04
NOW()	Returns the current date and time.	SELECT NOW(); → 2025-10-04 22:30:00
DATE_ADD()	Adds a time interval to a date.	SELECT DATE_ADD('2025-10-04', INTERVAL 10 DAY);
DATE_SUB()	Subtracts a time interval from a date.	SELECT DATE_SUB('2025-10-04', INTERVAL 1 MONTH);
YEAR()	Extracts the year from a date.	SELECT YEAR('2025-10-04'); → 2025
MONTH()	Extracts the month from a date.	SELECT MONTH('2025-10-04'); → 10
DAY()	Extracts the day of the month from a date.	SELECT DAY('2025-10-04'); → 4
DATEDIFF()	Returns the number of days between two dates.	SELECT DATEDIFF('2025-10-10', '2025-10-04'); → 6
IFNULL(expr, alt_value)	Returns alt_value if expr is NULL.	SELECT IFNULL(commission, 0) FROM employees;
COALESCE()	Returns the first non-null value in the list.	SELECT COALESCE(NULL, NULL, 'Sathish');
CONCAT()	Concatenates two or more strings.	SELECT CONCAT(first_name, ' ', last_name) FROM employees;
LENGTH()	Returns the length of a string in bytes.	SELECT LENGTH('MySQL'); → 5
UPPER()	Converts a string to uppercase.	SELECT UPPER('sathish'); → SATHISH
LOWER()	Converts a string to lowercase.	SELECT LOWER('MySQL'); → mysql
ROUND()	Rounds a number to the specified number of decimal places.	SELECT ROUND(123.456, 2); → 123.46
AVG()	Returns the average value of a numeric column.	SELECT AVG(salary) FROM employees;
SUM()	Returns the total sum of a numeric column.	SELECT SUM(salary) FROM employees;
COUNT()	Returns the number of rows matching a condition.	SELECT COUNT(*) FROM employees WHERE dept='Sales';
MAX()	Returns the maximum value.	SELECT MAX(salary) FROM employees;
MIN()	Returns the minimum value.	SELECT MIN(salary) FROM employees;
GROUP BY	Groups rows sharing a property for aggregation.	SELECT dept, AVG(salary) FROM employees GROUP BY dept;
HAVING	Filters aggregated results (used with GROUP BY).	SELECT dept, AVG(salary) FROM employees GROUP BY dept HAVING AVG(salary) > 5000;
ORDER BY	Sorts results in ascending or descending order.	SELECT * FROM employees ORDER BY salary DESC;
LIMIT	Limits the number of rows returned.	SELECT * FROM employees LIMIT 5;
INTERVAL	Used with DATE_ADD/DATE_SUB to specify time intervals.	SELECT DATE_ADD(NOW(), INTERVAL 5 DAY);