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| --- | --- | --- |
| Operator | Description | Example |
| = | Equals | WHERE age = 16 |
| != | Not equal to | WHERE grade != '12th' |
| <> | Not equal to (alternative) | WHERE grade <> '12th' |
| > | Greater than | WHERE age > 16 |
| < | Less than | WHERE age < 17 |
| >= | Greater than or equal to | WHERE age >= 16 |
| <= | Less than or equal to | WHERE age <= 18 |
| BETWEEN | Within a range (inclusive) | WHERE age BETWEEN 15 AND 17 |
| IN | Matches any in a list | WHERE grade IN ('10th', '12th') |
| NOT IN | Excludes list items | WHERE grade NOT IN ('9th', '11th') |
| LIKE | Pattern matching | WHERE name LIKE 'A%' (names starting with A) |
| NOT LIKE | Pattern not matching | WHERE name NOT LIKE '%a' (names not ending in a) |

More Date Pattern Examples

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| --- | --- |
| Pattern to be Matched | Matches |
| '2025-05-%' | Any day in May 2025 |
| '2024-12- ' | All 2-digit days in December 2024 |
| ' -01-01' | 1st January of any year |
| '202\_- - ' | Any date in the 2020s decade |
| ' - -3\_' | All dates from day 30 to 39 (not valid, but works syntactically) |

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| Function | Returns | Example Output |
| CURRENT\_DATE | Date only | 2025-05-02 |
| CURRENT\_TIME | Time only | 14:23:45 |
| NOW() | Date and time | 2025-05-02 14:23:45 |
| CURRENT\_TIMESTAMP | Date and time | 2025-05-02 14:23:45 |
| LOCALTIME | Date and time | 2025-05-02 14:23:45 |

Alternatives

ON DELETE CASCADE

ON DELETE RESTRICT

ON DELETE NO ACTION

ON DELETE SET DEFAULT

other DBMSs).

|  |  |  |
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| Function | Description | Example Usage |
| CONCAT() | Combine multiple strings | CONCAT('A', 'B') →  'AB' |
| LENGTH() | Length of a string (in bytes) | LENGTH('Hi') → 2 |

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| Function | Description | Example Usage |
| CHAR\_LENGTH() | Number of characters in a string | CHAR\_LENGTH('िहिंदी') →  5 |
| LOWER() | Convert string to lowercase | LOWER('MySQL') →  mysql |
| UPPER() | Convert string to uppercase | UPPER('hello') →  HELLO |
| REPLACE() | Replace part of a string | REPLACE('abc', 'b', 'x')  → axc |
| TRIM() | Remove leading/trailing spaces | TRIM(' hello ') →  hello |
| NOW() | Current date and time | NOW() |
| CURDATE() | Current date only | CURDATE() |
| CURTIME() | Current time only | CURTIME() |
| DATE() | Extract date from datetime | DATE(NOW()) |
| MONTHNAME() | Get month name from date | MONTHNAME('2025-05-03')  → May |
| YEAR() | Extract year from date | YEAR(NOW()) |
| DAY() | Extract day of month | DAY('2025-05-03') → 3 |
| DATEDIFF() | Days between two dates | DATEDIFF('2025-06-01', '2025-05-01') |
| ROUND() | Round to decimal places | ROUND(5.678, 2) →  5.68 |
| FLOOR() | Round down to nearest whole number | FLOOR(5.9) → 5 |
| CEIL() | Round up to nearest whole number | CEIL(5.1) → 6 |

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| Function | Description | Example Usage |
| ABS() | Absolute value | ABS(-10) → 10 |
| MOD() | Get remainder | MOD(10, 3) → 1 |
| RAND() | Random decimal between 0 and 1 | RAND() |
| IFNULL() | Replace NULL with a default value | IFNULL(NULL, 'N/A') →  N/A |
| COALESCE() | Return first non-NULL value in a list | COALESCE(NULL, '',  'Hello') → '' |
| COUNT() | Count rows | COUNT(\*) |
| AVG() | Average of a numeric column | AVG(score) |
| SUM() | Total sum of values | SUM(score) |
| MIN() | Smallest value | MIN(score) |
| MAX() | Largest value | MAX(score) |