| Clauses | How to Use It | Functionality |
| --- | --- | --- |
| CREATE TABLE | CREATE TABLE table\_name ... | Creates a new table |
| INSERT | INSERT INTO table\_name ... | Used to insert new data in the table |
| SELECT | SELECT col1, col2 .. | Retrieves the selected columns |
| SELECT | SELECT \* FROM ... | Retrieves all the columns from a table |
| FROM | FROM table\_name | FROM clause specifies the table(s) in which the required data columns are located |
| WHERE | WHERE col > 5 | Retrieves only specific rows based on the given conditions |
| UPDATE, SET | UPDATE table\_name SET column1 = value1; | Updates the value of a column of all the rows (or only specific rows using WHERE clause) |
| DELETE | DELETE FROM table\_name | Deletes all the rows from the table |
| DROP | DROP TABLE table\_name | Deletes the table from the database |
| ALTER | ALTER TABLE table\_name ... | Used to add, delete or modify columns in a table |
| ORDER BY | ORDER BY col1 ASC/DESC.. | Sorts the table based on the column(s) in the ascending or descending orders |
| DISTINCT | SELECT DISTINCT col, ... | Gets the unique values of given column(s) |
| LIMIT | LIMIT 10 | Limits the number of rows in the output to the mentioned number |
| OFFSET | OFFSET 5 | Specifies the position (from nth row) from where the chunk of the results are to be retrieved |
| GROUP BY | GROUP BY col ... | Groups the rows that have same values in the given columns |
| HAVING | HAVING col > 20 | Filters the resultant rows after the application of GROUP BY clause |
| CASE | CASE WHEN condition1 THEN value1 WHEN .. ELSE .. END | Returns a corresponding value when the first condition is met |

Clauses

Operators

| Operators | How to Use It | Functionality |
| --- | --- | --- |
| <> | WHERE col <> 5 | Filters the rows where the given column is not equal to 5. Similarly, other comparison operators (=,>,<,>=,<=) are also used. |
| LIKE | WHERE col LIKE '%Apple%' | Retrieves the rows where the given column has 'apple' within the text |
| AND | WHERE col1 > 5 AND col2 < 3 | Retrieves the rows that satisfy all the given conditions |
| OR | WHERE col1 > 5 OR col2 < 3 | Retrieves the rows that satisfy at least one condition |
| NOT | WHERE NOT col = 'apple' | Retrieves the rows if the condition(s) is NOT TRUE |
| IN | WHERE col IN ('Apple', 'Microsoft') | Retrieves the rows if the column value is present in the given values |
| BETWEEN | WHERE col BETWEEN 3 AND 5 | Retrieves the rows if the column value is present between (and including) the given values |

Functions

| Functions | How to Use It | Functionality |
| --- | --- | --- |
| COUNT | SELECT COUNT(col) ... | Counts the number of values in the given column |
| SUM | SELECT SUM(col) ... | Adds all the values of given column |
| MIN | SELECT MIN(col) ... | Gets the minimum value of given column |
| MAX | SELECT MAX(col) ... | Gets the maximum value of given column |
| AVG | SELECT AVG(col) ... | Gets the average of the values present in the given column |
| strftime() | strftime("%Y", col) ... | Extracts the year from the column value in string format. Similarly, we can extract month, day, week of the day and many. |
| CAST() | CAST(col AS datatype) ... | Converts the value to the given datatype |
| FLOOR() | FLOOR(col) | Rounds a number to the nearest integer below its current value |
| CEIL() | CEIL (col) | Rounds a number to the nearest integer above its current value |
| ROUND() | ROUND(col) | Rounds a number to a specified number of decimal places |
| UPPER() | UPPER(col) | Converts a string to upper case |
| LOWER() | Lower(col) | Converts a string to lower case |