Pre-Joining Topics

Week 2: MYSQL ADVANCED

AGGREGATE FUNCTIONS

MySQL Aggregate Functions are used to calculate values from multiple rows and return a single result, helping in summarizing and analyzing data. They include functions for counting, summing, averaging, and finding maximum or minimum values, often used with the **GROUP BY** clause.

Syntax:

```
SELECT AGGREGATE_FUNCTION(column_name)
FROM table_name
WHERE condition;
```

Where,

- **AGGREGATE_FUNCTION():** The aggregate function you want to use (e.g., COUNT, SUM).
- **column_name:** The column on which the function is applied.
- **table_name:** The name of the table from which to retrieve the data.
- **condition:** An optional WHERE clause to filter the rows.

Count()

The **COUNT()** function returns the number of rows that match a specified condition. It can count all rows or only rows that meet certain criteria.

Example:

```
SELECT COUNT(*) AS total_employees FROM employees;
```

SUM()

The **SUM()** function returns the total sum of a numeric column.

Example:

```
SELECT SUM(salary) AS total_sales FROM employees;
```

AVG()

The **AVG()** function returns the average value of a numeric column.

Example:

SELECT AVG(salary) AS average_salary FROM employees;

MAX()

The **MAX()** function returns the maximum value in a set of values.

Example:

SELECT MAX(salary) AS highest_salary FROM employees;

MIN()

The **MIN()** function returns the minimum value in a set of values.

Example:

SELECT MIN(salary) AS lowest_salary FROM employees;

References:

GeeksForgeeks