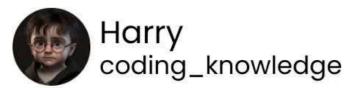


SQL Functions

used for data analysis task







AGGREGATE FUNCTIONS

1. COUNT ():

This function returns **the number of rows in a table** or **the number of non-null values** in a column.

Syntax:

SELECT COUNT(column_name) FROM table_name;

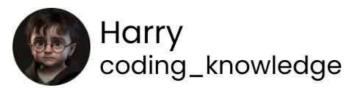
2. SUM ():

This function returns the sum of all values in a numeric column.

Syntax:

SELECT SUM(column_name) FROM table_name;





3. AVG ():

This function returns the average of all values in a numeric column.

Syntax:

SELECT AVG(column_name) FROM table_name;

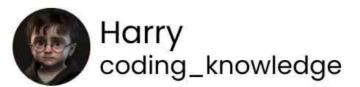
4. MIN ():

This function returns the minimum value in a column.

Syntax:

SELECT MIN(column_name) FROM table_name;





5. MAX ():

This function returns the maximum value in a column.

Syntax:

SELECT MAX(column_name) FROM table_name;

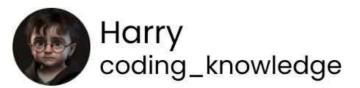
6. GROUP BY ():

This function is used to group the rows in a table based on the values in one or more columns, and then perform aggregate functions on each group.

Syntax:

SELECT column_name, COUNT(column_name), SUM(column_name), AVG(column_name), MIN(column_name), Max(column_name) FROM table_name GROUP BY column_name;





STRING FUNCTIONS

7. CONCAT ():

This function is used to concatenate two or more strings together.

Syntax:

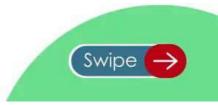
SELECT CONCAT(string1, string2) FROM table_name;

8. UPPER ():

This function is used to convert all characters in a string to uppercase.

Syntax:

SELECT UPPER(string) FROM table_name;





9. LOWER():

This function is used to convert all characters in a string to lowercase.

Syntax:

SELECT LOWER (string) FROM table_name;

10. LENGTH ():

This function is used to return the length of a string.

Syntax:

SELECT LENGTH(string) FROM table_name;





DATE FUNCTIONS

11. GETDATE ():

This function returns the current date and time.

Syntax:

SELECT GETDATE() **FROM** table_name;

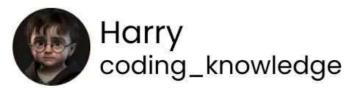
12. DATEPART ():

This function is used to extract a specific part of a date, such as the year, month, or day.

Syntax:

SELECT DATEPART (part, date) FROM table_name;





13. DATEADD():

This function is used to add a specificed number of units to a date or time value.

Syntax:

SELECT DATEADD (unit, value, date) FROM table_name;

14. YEAR ():

This function is used to extract the year from a date value.

Syntax:

SELECT YEAR (date) FROM table_name;

