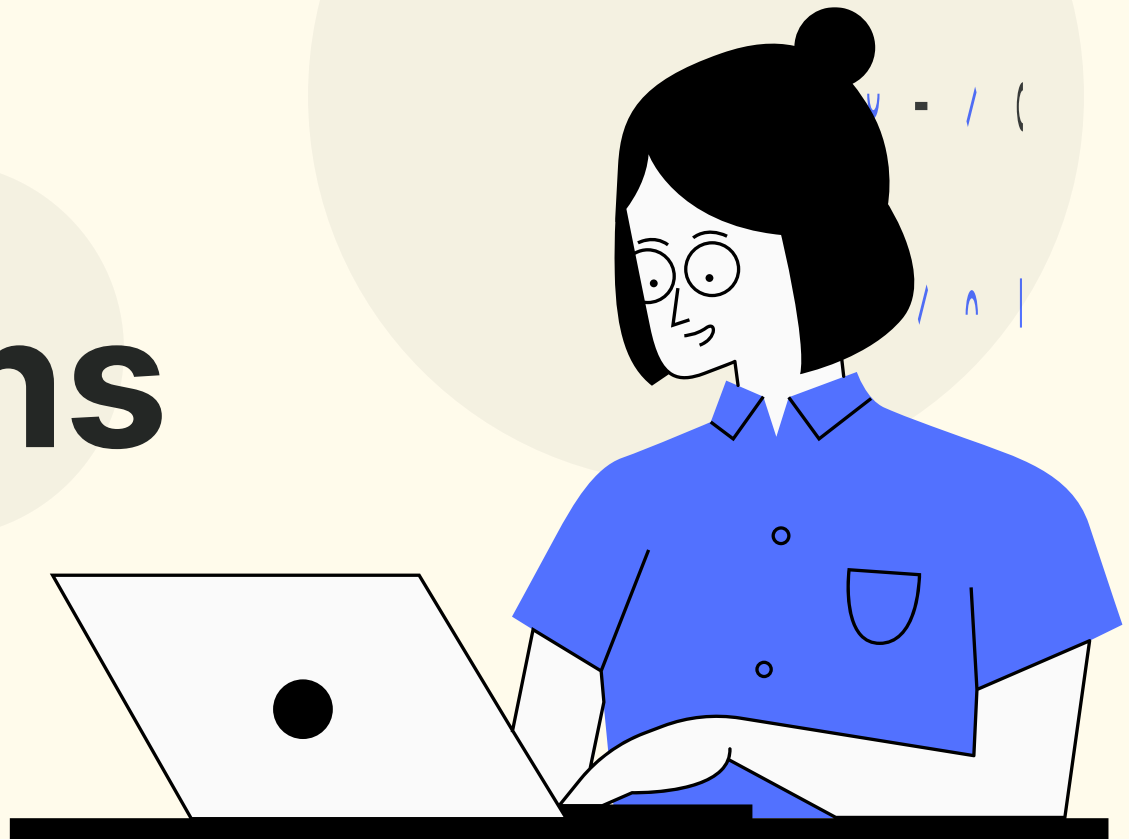



Mostly Asked SQL functions



- By Sakshi Yadav

● COUNT() ●


Use Case: Counts the number of rows in a dataset.



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

● SUM() ●

Use Case: Adds up values in a numeric column.



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

● AVG() ●

Use Case: Calculates the average value of a numeric column.

```
● ● ●  
  
SELECT AVG(salary) AS average_salary  
FROM employees;
```

MAX()

Use Case: Finds the maximum value in a column.

```
SELECT MAX(salary) AS highest_salary  
FROM employees;
```


● MIN() ●

Use Case: Finds the minimum value in a column.

```
● ● ●  
  
SELECT MIN(salary) AS lowest_salary  
FROM employees;
```

● ROUND() ●

Use Case: Rounds a numeric value to a specified number of decimal places.



```
SELECT ROUND(AVG(salary), 2) AS average_salary  
FROM employees;
```

● CONCAT() ●


Use Case: Combines two or more strings into one string.



```
SELECT CONCAT(first_name, ' ', last_name) AS full_name
FROM employees;
```


LEN()


Use Case: Returns the length of a string.



```
SELECT LEN(first_name) AS name_length  
FROM employees;
```

• SUBSTRING() •


Use Case: Extracts a portion of a string.



```
SELECT SUBSTRING(first_name, 1, 3) AS short_name  
FROM employees;
```

● TRIM() ●


Use Case: Removes leading and trailing spaces from a string.



```
SELECT TRIM(name) AS clean_name  
FROM employees;
```

• UPPER() / LOWER() •


Use Case: Converts a string to uppercase or lowercase.



```
SELECT UPPER(first_name) AS uppercase_name  
FROM employees;
```

• COALESCE() •

Use Case: Returns the first non-null value from a list of expressions.



```
SELECT COALESCE(phone_number, 'N/A') AS contact_number  
FROM employees;
```


CASE

Use Case: Creates conditional logic in SQL queries.

```
SELECT first_name,  
       CASE  
         WHEN salary > 50000 THEN 'High'  
         WHEN salary BETWEEN 30000 AND 50000 THEN 'Medium'  
         ELSE 'Low'  
       END AS salary_band  
FROM employees;
```

• DATEPART() •


Use Case: Extracts a specific part of a date.



```
SELECT DATEPART(year, hire_date) AS hire_year  
FROM employees;
```

• DATEDIFF() •

Use Case: Calculates the difference between two dates.



```
SELECT DATEDIFF(day, hire_date, GETDATE()) AS days_since_hired
FROM employees;
```