**CASE WHEN**

In SQL, the CASE WHEN statement is a conditional expression that allows you to perform conditional logic within a query. It is used to evaluate one or more conditions and return a result based on the condition that evaluates to true.

The basic syntax of the CASE WHEN statement is as follows:

CASE

WHEN condition1 THEN result1

WHEN condition2 THEN result2

...

ELSE resultN

END

create database new;

use new;

1. Creating a table and changing a name using CASE WHEN:

CREATE TABLE employees (

id INT,

first\_name VARCHAR(50),

last\_name VARCHAR(50),

department VARCHAR(50)

);

INSERT INTO employees (id, first\_name, last\_name, department)

VALUES (1, 'John', 'Doe', 'IT'),

(2, 'Jane', 'Smith', 'HR'),

(3, 'Mark', 'Johnson', 'Finance');

SELECT

id,

CASE

WHEN first\_name = 'John' THEN 'Jonathan'

WHEN first\_name = 'Jane' THEN 'Janet'

ELSE first\_name

END AS new\_first\_name,

last\_name,

department

FROM employees;

In this example, the INSERT INTO statement is used to populate the employees table with some initial data. Then, the SELECT statement with the CASE WHEN statement is used to query the table and conditionally change the first\_name column's value based on specific conditions.

1. Creating a table and counting with CASE WHEN:

CREATE TABLE orders (

id INT,

product VARCHAR(50),

quantity INT,

status VARCHAR(50)

);

INSERT INTO orders (id, product, quantity, status)

VALUES (1, 'Product A', 10, 'Shipped'),

(2, 'Product A', 5, 'Pending'),

(3, 'Product B', 8, 'Shipped'),

(4, 'Product B', 2, 'Cancelled'),

(5, 'Product C', 15, 'Pending'),

(6, 'Product C', 20, 'Shipped');

SELECT

product,

COUNT(CASE WHEN status = 'Shipped' THEN 1 END) AS shipped\_count,

COUNT(CASE WHEN status = 'Pending' THEN 1 END) AS pending\_count,

COUNT(CASE WHEN status = 'Cancelled' THEN 1 END) AS cancelled\_count

FROM orders

GROUP BY product;

In this example, the INSERT INTO statement is used to populate the orders table with some initial data. Then, the SELECT statement with the CASE WHEN statement is used to count the occurrences of different statuses ('Shipped', 'Pending', 'Cancelled') for each product.

1. Creating a table and summing values with CASE WHEN:

CREATE TABLE sales (

id INT,

product VARCHAR(50),

quantity INT,

price DECIMAL(10, 2),

status VARCHAR(50)

);

INSERT INTO sales (id, product, quantity, price, status)

VALUES (1, 'Product A', 5, 10.00, 'Complete'),

(2, 'Product A', 3, 10.00, 'Pending'),

(3, 'Product B', 2, 15.00, 'Complete'),

(4, 'Product B', 4, 15.00, 'Cancelled'),

(5, 'Product C', 10, 5.00, 'Pending'),

(6, 'Product C', 8, 5.00, 'Complete');

SELECT

product,

SUM(CASE WHEN status = 'Complete' THEN quantity \* price END) AS total\_complete\_sales,

SUM(CASE WHEN status = 'Pending' THEN quantity \* price END) AS total\_pending\_sales,

SUM(CASE WHEN status = 'Cancelled' THEN quantity \* price END) AS total\_cancelled\_sales

FROM sales

GROUP BY product;

Question :

CREATE TABLE employees2 (

id INT,

first\_name VARCHAR(50),

last\_name VARCHAR(50),

salary DECIMAL(10, 2)

);

INSERT INTO employees2 (id, first\_name, last\_name, salary)

VALUES (1, 'John', 'Doe', 55000.00),

(2, 'Jane', 'Smith', 72000.00),

(3, 'Mark', 'Johnson', 62000.00),

(4, 'Sarah', 'Williams', 48000.00),

(5, 'Michael', 'Brown', 95000.00),

(6, 'Emily', 'Davis', 55000.00);

select \* from employees2;

Question : Create a new column

salary is more 90k , high

salary is more than 45000 medium

other wise low

SELECT

first\_name,

last\_name,

salary,

CASE

WHEN salary >= 90000.00 THEN 'High'

WHEN salary >= 60000.00 and salary < 89000.00 THEN 'Medium'

ELSE 'Low'

END AS salary\_bucket

FROM employees2;