

Create database jpatil

use jpatil

```
CREATE TABLE Employee (  
    emp_no INT PRIMARY KEY,  
    emp_name VARCHAR(50),  
    emp_address VARCHAR(100),  
    salary DECIMAL(10, 2),  
    dept_id INT  
);
```

```
INSERT INTO Employee (emp_no, emp_name, emp_address, salary, dept_id) VALUES  
(101, 'John Doe', '123 Elm Street', 55000.00, 1),  
(102, 'Jane Smith', '456 Oak Avenue', 62000.00, 2),  
(103, 'Mike Johnson', '789 Pine Road', 48000.00, 1),  
(104, 'Emily Davis', '321 Birch Lane', 70000.00, 3),  
(105, 'Sarah Brown', '654 Cedar Court', 53000.00, 2);
```

```
SELECT * FROM Employee;
```

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Aggregate Functions

-- Total Salary

SELECT SUM(salary) AS TotalSalary FROM Employee;

-- Average Salary

SELECT AVG(salary) AS AverageSalary FROM Employee;

-- Count of Employees

SELECT COUNT(emp_no) AS EmployeeCount FROM Employee;

-- Maximum Salary

SELECT MAX(salary) AS MaxSalary FROM Employee;

-- Minimum Salary

SELECT MIN(salary) AS MinSalary FROM Employee;

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String Functions

-- Concatenate employee name and address

SELECT CONCAT(emp_name, ' - ', emp_address) AS NameAndAddress FROM Employee;

-- Convert employee name to uppercase

```
SELECT UPPER(emp_name) AS UpperCaseName FROM Employee;
```

-- Convert employee name to lowercase

```
SELECT LOWER(emp_name) AS LowerCaseName FROM Employee;
```

-- Get the length of employee names

```
SELECT LENGTH(emp_name) AS NameLength FROM Employee;
```

-- Extract the first three characters of employee names

```
SELECT SUBSTRING(emp_name, 1, 3) AS NamePrefix FROM Employee;
```

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Math Functions

-- Absolute value of salary difference from 70000

```
SELECT emp_name, ABS(salary - 70000) AS AbsDifference FROM Employee;
```

-- Round salary to the nearest integer

```
SELECT emp_name, ROUND(salary) AS RoundedSalary FROM Employee;
```

-- Ceiling of salary

```
SELECT emp_name, CEIL(salary) AS CeilSalary FROM Employee;
```

-- Floor of salary

```
SELECT emp_name, FLOOR(salary) AS FloorSalary FROM Employee;
```

-- Square of salary

```
SELECT emp_name, POWER(salary, 2) AS SalarySquare FROM Employee;
```

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Date Functions

-- Current date

```
SELECT CURDATE() AS CurrentDate;
```

-- Current date and time

```
SELECT NOW() AS CurrentDateTime;
```

-- Extract year from current date

```
SELECT YEAR(CURDATE()) AS CurrentYear;
```

-- Extract month from current date

```
SELECT MONTH(CURDATE()) AS CurrentMonth;
```

-- Calculate days between two dates

```
SELECT DATEDIFF('2024-12-31', CURDATE()) AS DaysUntilYearEnd;
```