# **CRUD Operations in SQL Server**

# Introduction

CRUD stands for Create, Read, Update, and Delete. These are the four basic operations for managing data in a relational database. In Microsoft SQL Server (MSSQL), SQL queries are used to perform these operations. This document provides examples and explanations for each CRUD operation.

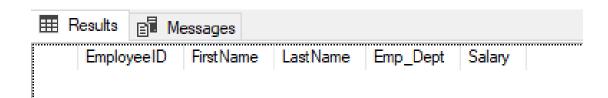
# 1. Create Operation

The CREATE operation is used to insert new records into a table.

## **Example**

```
Create Table:
```

```
CREATE TABLE Employee(
EmployeeID int PRIMARY KEY,
FirstName varchar(10),
LastName varchar(10),
Emp_Dept varchar(5),
Salary int
);
```



#### **Insert Data:**

0/P:

```
INSERT INTO Employee
(EmployeeID,FirstName,LastName ,Emp_Dept,Salary )
```

```
VALUES (1, 'Deven', 'Gupta', 'IT', 45000);
```

## 0/P:



# 2. Read Operation

The READ operation is used to query and retrieve data from a table.

# Example

#### Select All Records:

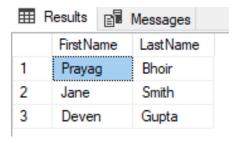
SELECT \* FROM Employee;

#### 0/P:

⊞ Results					
	EmployeeID	FirstName	LastName	Emp_Dept	Salary
1	1	Prayag	Bhoir	IT	40000
2	2	Jane	Smith	IT	60000
3	3	Bob	Johnson	Comps	55000
4	4	Alice	Williams	Mech	70000
5	5	Charlie	Brown	Comps	45000
6	6	Deven	Gupta	IT	35000

## Select Specific Records:

SELECT FirstName, LastName FROM Employee WHERE Emp\_Dept = 'IT';
O/P:



# 3. Update Operation

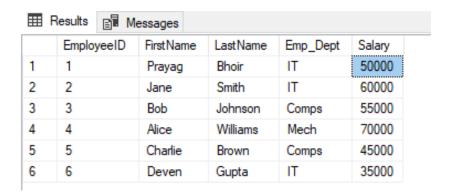
The UPDATE operation is used to modify existing records in a table.

# **Example**

#### Update Salary:

UPDATE Employee SET Salary=50000 WHERE EmployeeID=1;

#### 0/P:



# 4. Delete Operation

The DELETE operation is used to remove records from a table.

## **Example**

#### Delete a Record:

DELETE FROM Employee WHERE EmployeeID = 5;

#### 0/P:

