# PROMPT-Give the detailed documentation of update command with syntax and 2 examples as a fresher in postgresql

**🔍 What is the UPDATE Command?**

The UPDATE command is used to **modify existing data** in one or more rows of a table.

✅ If INSERT adds new rows, UPDATE changes data in existing rows.

**🔧 Syntax of UPDATE**

sql

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UPDATE table\_name

SET column1 = value1,

column2 = value2,

...

WHERE condition;

**🔑 Components:**

| **Part** | **Description** |
| --- | --- |
| table\_name | Name of the table you want to update |
| SET | Specifies the column(s) you want to change |
| value | New value(s) to assign |
| WHERE | Condition that selects which row(s) to update |

⚠️ **Always include a WHERE clause** to avoid updating every row by accident.

**🧠 Why Use UPDATE?**

* To fix incorrect or outdated information
* To increase or decrease account balances
* To change customer contact details
* To update employee roles, grades, prices, etc.

**🎯 Example Table: customers**

sql

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CREATE TABLE customers (

customer\_id VARCHAR(10) PRIMARY KEY,

full\_name VARCHAR(100),

gender VARCHAR(10),

date\_of\_birth DATE,

contact VARCHAR(15),

account\_type VARCHAR(20),

balance DECIMAL(10,2),

bank\_id VARCHAR(10)

);

**✅ Example 1: Update Customer Contact Number**

Suppose the contact number of customer C001 has changed.

sql

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UPDATE customers

SET contact = '9876543211'

WHERE customer\_id = 'C001';

**🔍 Explanation:**

* SET contact = '9876543211': Updates the contact column.
* WHERE customer\_id = 'C001': Only applies the change to that specific customer.

✅ Result: Only the row with customer\_id = 'C001' is updated.

**✅ Example 2: Add Bonus to All Savings Accounts**

Let's say you want to **add ₹100 bonus** to all customers with a **Savings** account.

sql

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UPDATE customers

SET balance = balance + 100.00

WHERE account\_type = 'Savings';

**🔍 Explanation:**

* balance = balance + 100.00: Increases the current balance by 100.
* WHERE account\_type = 'Savings': Affects only rows where account\_type is 'Savings'.

✅ Result: All savings account holders receive a ₹100 bonus.

**🔁 Update Multiple Columns**

You can update more than one column at once:

sql

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UPDATE customers

SET full\_name = 'Rahul Mehra',

contact = '9999999999'

WHERE customer\_id = 'C002';

✅ Changes both the name and contact number for one customer.

**⚠️ Common Mistakes and Tips**

| **Mistake** | **Problem** | **Solution** |
| --- | --- | --- |
| No WHERE clause | All rows get updated | Always use a condition |
| Wrong data type | Update fails | Match value to column type |
| Quotes missing | Error with strings or dates | Use 'text' or 'YYYY-MM-DD' |
| Column name typo | Error or no change | Double-check column names |

**📌 Summary Table**

| **Concept** | **Description** |
| --- | --- |
| UPDATE | Modifies existing records in a table |
| SET | Assigns new values to columns |
| WHERE | Restricts which rows are updated |
| Multiple columns | Can be updated in one statement |
| Safe update | Always double-check conditions |

**✅ Quick Review**

**Syntax:**

sql

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UPDATE table\_name

SET column1 = value1, column2 = value2

WHERE condition;

**Example:**

sql

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UPDATE customers

SET balance = balance + 500

WHERE customer\_id = 'C003';