

SELECT * INTO and **INSERT INTO** are both SQL statements used to insert data into a table, but they are used in different contexts and have different purposes.

1. SELECT * INTO

- **Purpose:** Copies data from one table to a new table.
- **Usage:** Creates a new table and inserts the result set of a SELECT query into it.
- **Result:** The new table is created with the same structure as the source table (including data types), and the data is copied into it.

Syntax

SELECT *

INTO new_table

FROM existing_table

WHERE condition;

Key Points:

- The new_table must not already exist; SELECT INTO will create it.
- Copies both the structure and the data.
- You can select specific columns instead of *

2. INSERT INTO

- **Purpose:** Insert data into an existing table.
- **Usage:** Adds data to an existing table by specifying the values directly or copying from another table.
- **Result:** Data is inserted into the specified existing table.

Syntax:

2.1 Inserting specific values:

INSERT INTO table_name (column1, column2, column3, ...)

VALUES (value1, value2, value3, ...);

2.2 Inserting data from another table:

INSERT INTO table_name (column1, column2, column3, ...)

SELECT column1, column2, column3, ...

FROM source_table

WHERE condition;

Key Points:

- The table_name must already exist; INSERT INTO does not create a new table.
- Can insert data from another table or from specified values.
- Requires you to specify the columns to insert data into if you are not inserting into all columns.

Key Differences

1. Table Creation:

- SELECT * INTO: Creates a new table and inserts data into it.
- INSERT INTO: Inserts data into an existing table.

2. Use Case:

- SELECT * INTO: Used when you need to create a copy of a table or part of a table.
- INSERT INTO: Used when you need to add data to an already existing table.

3. Flexibility:

- SELECT * INTO: Automatically creates the table with the same structure as the source table.
- INSERT INTO: Allows more flexibility in inserting specific columns and values, but the table must already exist.