

# SQL: Using JOIN with INSERT

The **INSERT INTO ... SELECT** statement allows you to insert data into a table by **selecting rows from one or more tables using JOINs**. This is useful when you want to copy or transform data from related tables into another table.

## Syntax

```
INSERT INTO target_table (column1, column2, ...)
SELECT source_column1, source_column2, ...
FROM source_table1
JOIN source_table2
ON source_table1.key = source_table2.key
WHERE condition;
• target_table → The table where data will be inserted
• source_table1, source_table2 → Tables from which data is selected
• JOIN → Can be INNER JOIN, LEFT JOIN, etc.
• WHERE → Optional filter for selecting specific rows
```

## Example : Simple INSERT with JOIN

Suppose we have two tables:

### Table: Employees

EmpID	Name	DeptID
1	John	101
2	Jane	102

**Table: Departments**

DeptID	DeptName
101	HR
102	IT

We want to insert all employee names with their department names into a new table EmployeeDept.

**Step 1: Create the target table**

```
CREATE TABLE EmployeeDept (
    EmpName VARCHAR(50),
    DeptName VARCHAR(50)
);
```

**Step 2: Insert using JOIN**

```
INSERT INTO EmployeeDept (EmpName, DeptName)
SELECT e.Name, d.DeptName
FROM Employees e
JOIN Departments d
ON e.DeptID = d.DeptID;
Result in EmployeeDept
```

<b>EmpNam</b>	<b>DeptNam</b>
e	e
John	HR
Jane	IT