I have used the following 2 tables Employee and Department as examples.

**Employee Table :- Department Table:-**

EmployeeID EmployeeName DepartmentID DepartmentID DepartmentName
1 Smith 1 1 HR
2 Jack 2 2 Finance
3 Jones 2 3 Security
4 Andrews 3 4 Sports
5 Dave 5 5 HouseKeeping
6 Jospeh 6 Electrical
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**Inner Join**

An Inner Join will take two tables and join them together based on the values in common columns ( linking field ) from each table.

**Example 1 :-**To retrieve only the information about those employees who are assinged to a department.

Select Employee.EmployeeID,Employee.EmployeeName,Department.DepartmentName From Employee Inner Join Department on Employee.DepartmentID = Department.DepartmentID

The ResultSet will be :-

EmployeeID EmployeeName DepartmentName
1 Smith HR
2 Jack Finance
3 Jones Finance
4 Andrews Security
5 Dave HouseKeeping

**Example 2:-**Retrieve only the information about departments to which atleast one employee is assigned.

Select Department.DepartmentID,Department.DepartmentName From Department Inner Join Employee on Employee.DepartmentID = Department.DepartmentID

The ResultSet will be :-

DepartmentID DepartmentName
1 HR
2 Finance
3 Security
5 HouseKeeping
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**Outer Joins :-**

Outer joins can be a left, a right, or full outer join.

**Left outer join**selects all the rows from the left table specified in the LEFT OUTER JOIN clause, not just the ones in which the joined columns match.

**Example 1:-**To retrieve the information of all the employees along with their Department Name if they are assigned to any department.

Select Employee.EmployeeID,Employee.EmployeeName,Department.DepartmentName From Employee LEFT OUTER JOIN Department on Employee.DepartmentID = Department.DepartmentID

The ResultSet will be :-

EmployeeID EmployeeName DepartmentName
1 Smith HR
2 Jack Finance
3 Jones Finance
4 Andrews Security
5 Dave HouseKeeping
6 Jospeh

**Right outer join** selects all the rows from the right table specified in the RIGHT OUTER JOIN clause, not just the ones in which the joined columns match.

**Example 2:-**use Right Outer join to retrieve the information of all the departments along with the detail of EmployeeName belonging to each Department, if any is available.

Select Department.DepartmentID,Department.DepartmentName,Employee.EmployeeName From Employee Outer Join Department on Employee.DepartmentID = Department.DepartmentID

The ResultSet will be :-

DepartmentID DepartmentName EmployeeName
1 HR Smith
2 Finance Jack
2 Finance Jones
3 Security Andrews
4 Sports NULL
5 HouseKeeping Dave
6 Electrical NULL

This query will result in Null value for Employee Name where no Employee is assigned to that department.