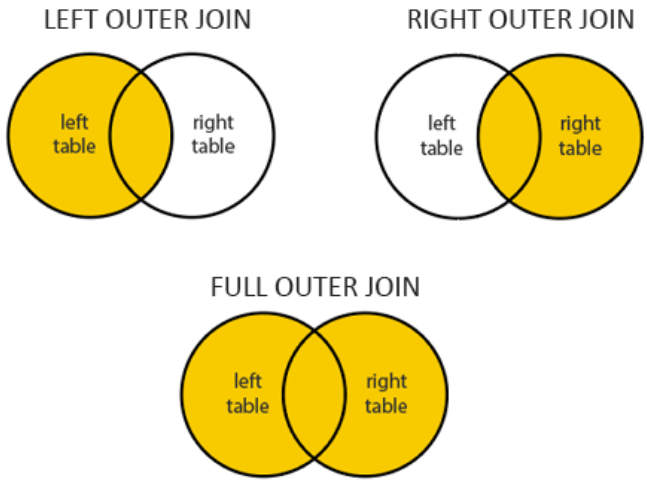

Outer join is a type of SQL join that combines rows from two or more tables based on a common field between the tables, or on the absence of a common field between the tables. Outer joins are more complex than inner joins, but they can be used to retrieve more data from the tables involved.

There are four types of outer joins:

- **Left join**
- **Right join**
- **Full outer join**
- **Full join**

Left join returns all rows from the left table, even if there are no matching rows in the right table.

Right join returns all rows from the right table, even if there are no matching rows in the left table.

Full outer join returns all rows from both the left and right tables, even if there are no matching rows in the other table.

Full join is the same as a full outer join.

Outer join in MySQL in PHP

To perform an outer join in MySQL using PHP, you can use the following steps:

1. Connect to the MySQL database using the mysqli_connect() function.
2. Write a SQL query to perform the outer join. The following is an example of a left outer join query:

SQL
```sql
SELECT * FROM table1 LEFT JOIN table2 ON table1.column_name =
table2.column_name;
```

Replace table1 and table2 with the names of the tables you want to join, and column_name with the name of the column that the two tables have in common (if there is one).

3. Execute the query using the mysqli_query() function.
4. Fetch the results of the query using the mysqli_fetch_assoc() function.
5. Display the results of the query.

Here is an example of a complete PHP script that performs a left outer join between two tables:

PHP
```php
<?php

// Connect to the MySQL database
$mysqli = new mysqli('localhost', 'username', 'password',
'database');

// Write the SQL query to perform the left outer join
$sql = 'SELECT * FROM customers LEFT JOIN orders ON customers.id =
orders.customer_id';

// Execute the query
$result = $mysqli->query($sql);

// Fetch the results of the query
$rows = array();
while ($row = $result->fetch_assoc()) {
    $rows[] = $row;
}

// Close the database connection
$mysqli->close();

// Display the results of the query
echo '<table>';
echo '<tr><th>Customer Name</th><th>Order ID</th></tr>';
foreach ($rows as $row) {
    echo '<tr>';
```

```
    echo '<td>' . $row['customer_name'] . '</td>';
    echo '<td>' . $row['order_id'] . '</td>';
    echo '</tr>';
}
echo '</table>';

?>
```

This script will output a table with all of the customers, even if they do not have any orders.

Outer joins can be used to retrieve more data from the tables involved than inner joins. They are often used in reports and analytics applications.