ANY

In MySQL, the `ANY` and `ALL` functions are used in conjunction with comparison operators to compare a value against a set of values returned by a subquery. These functions help determine if a specified condition is true for any or all of the values in the result set of the subquery. Here's a detailed explanation of both functions, including examples:

```
CREATE TABLE Employees (
    EmployeeID INT PRIMARY KEY,
    Name VARCHAR(50),
    Salary DECIMAL(10, 2),
    Department VARCHAR(50)
);

INSERT INTO Employees (EmployeeID, Name, Salary, Department) VALUES
(1, 'Alice', 60000, 'HR'),
(2, 'Bob', 50000, 'IT'),
(3, 'Charlie', 70000, 'HR'),
(4, 'David', 55000, 'Finance'),
(5, 'Eve', 75000, 'HR'),
(6, 'Frank', 45000, 'IT'),
(7, 'Grace', 48000, 'IT');
```

To find the salaries of employees whose salary is less than **any** employee's salary in the HR department, you can use the `ANY` operator in conjunction with a subquery that selects the salaries of employees from the HR department.

```
SELECT *
FROM Employees
WHERE Salary < ANY (SELECT Salary FROM Employees WHERE Department = 'HR');
```

Breakdown

1. **SELECT ***:
    - This part of the query specifies that we want to retrieve all columns (`*`) from the results.
    - It means that for each row that matches the conditions, all the information (like `EmployeeID`, `Name`, `Salary`, `Department`) will be included in the output.
2. **FROM Employees**:
    - This indicates the source of the data we are querying from, which is the `Employees` table.

- It tells the SQL engine to look in the `Employees` table for the rows that meet the specified condition in the `WHERE` clause.

3. **WHERE Salary < ANY (...)**:
   - The `WHERE` clause filters the results based on a specific condition.
   - Here, it states that we are looking for rows where the `Salary` is **less than** any of the values returned by the subquery inside the parentheses.
   - The `ANY` operator means that the condition must be true for at least one value in the result set of the subquery.
4. **(SELECT Salary FROM Employees WHERE Department = 'HR')**:
   - This is a **subquery** that will return a set of salaries from the `Employees` table.
   - It selects the `Salary` column from the `Employees` table, but only for those employees whose `Department` is 'HR'.
   - The result of this subquery will be the salaries of all employees in the HR department. In our case, from the example data, this will return:
     - **60000** (Alice)
     - **70000** (Charlie)
     - **75000** (Eve)

ALL

We want to find employees whose salary is greater than all employees in the HR department.

```
SELECT *
FROM Employees
WHERE Salary > ALL (SELECT Salary FROM Employees WHERE Department = 'HR');
```

Breakdown of the Query

1. **SELECT ***:
   - This retrieves all columns for each row that matches the condition.
2. **FROM Employees**:
   - Specifies the table we are querying from, which is the `Employees` table.
3. **WHERE Salary > ALL (...)**:
   - The `WHERE` clause filters the results based on a condition.
   - The condition `Salary > ALL (...)` checks if the employee's salary is greater than **every** value returned by the subquery in parentheses.