

Worksheet on MySQL – Equal Join of Two Tables

Class: XII | Subject: Computer Science | Topic: MySQL Equal Join

1. What is an Equal Join in MySQL? Give an example.
2. Write an SQL query to display student names and their corresponding class names using an equal join from tables STUDENT and CLASS.
3. Explain the difference between Equal Join and Natural Join with an example.
4. Consider two tables: EMPLOYEE(emp_id, emp_name, dept_id) and DEPARTMENT(dept_id, dept_name). Write a query using equal join to display employee names along with their department names.
5. What condition is used in the WHERE clause for an Equal Join?
6. Write a query to display the order details with customer names from tables ORDERS and CUSTOMERS using Equal Join.

7. Give an example of how to join two tables TEACHER and SUBJECT using Equal Join where the common field is subject_id.

8. Explain the importance of specifying the common column in Equal Join.

9. Write a query to join two tables CITY and COUNTRY where city.country_id = country.country_id.

10. How is Equal Join different from Cartesian Join? Give an example.

Answer Sheet

1. Equal Join combines records from two or more tables based on a related column using the equality operator (=). Example: `SELECT * FROM STUDENT, CLASS WHERE STUDENT.class_id = CLASS.class_id;`
2. `SELECT STUDENT.name, CLASS.class_name FROM STUDENT, CLASS WHERE STUDENT.class_id = CLASS.class_id;`
3. Equal Join uses a condition based on equality, while Natural Join automatically joins tables with same column names. Example: Equal Join – `SELECT * FROM A, B WHERE A.id = B.id;` Natural Join – `SELECT * FROM A NATURAL JOIN B;`
4. `SELECT EMPLOYEE.emp_name, DEPARTMENT.dept_name FROM EMPLOYEE, DEPARTMENT WHERE EMPLOYEE.dept_id = DEPARTMENT.dept_id;`
5. The condition used is equality (=) between the common columns of both tables.
6. `SELECT ORDERS.order_id, CUSTOMERS.customer_name FROM ORDERS, CUSTOMERS WHERE ORDERS.customer_id = CUSTOMERS.customer_id;`
7. `SELECT TEACHER.teacher_name, SUBJECT.subject_name FROM TEACHER, SUBJECT WHERE TEACHER.subject_id = SUBJECT.subject_id;`
8. Without specifying the common column, the join results in a Cartesian product, producing incorrect data combinations.
9. `SELECT CITY.city_name, COUNTRY.country_name FROM CITY, COUNTRY WHERE CITY.country_id = COUNTRY.country_id;`
10. Equal Join matches rows based on equality condition, while Cartesian Join pairs every row of one table with every row of another without any condition.