**SQL\_SESSION\_11**

JOINS

* SELECT students.student\_fname, students.student\_lname, courses.course\_name FROM students JOIN courses ON students.selected\_course = courses.course\_id;
* By default it is a INNER JOIN.
* **INNER JOIN :** INNER JOIN only considered matching data and non-matching data or records are discarded.
* **LEFT OUTER JOIN :** (All matching records from left and right tables are considered) + (All the non-matching records in the left table that does not match with the right table padded with null).
* **CREATE TABLE student\_latest AS SELECT \* FROM student;** - Copy the table, while copying No constraint will come into the new table, but all the data that is present in the old table will be present into the copied table.
* **Example of LEFT OUTER JOIN :** SELECT students.student\_fname, students.student\_lname, courses.course\_name FROM students LEFT JOIN courses ON students.selected\_course = courses.course\_id; - It will return matching records as well as all non-matching records from left table or first table.
* **RIGHT OUTER JOIN :** (All matching records from left and right tables are considered) + (All the non-matching records in the right table that does not match with the left table padded with null).
* **Example of RIGHT OUTER JOIN :** SELECT students.student\_fname, students.student\_lname, courses.course\_name FROM students RIGHT JOIN courses ON students.selected\_course = courses.course\_id; - It will return matching records as well as all non-matching records from right table or second table.
* **FULL OUTER JOIN :** (All the matching records) + (non-matching records from left table) + (non-matching records from right table). In MYSQL we do not have full outer join as a keyword so we use **UNION** in place of it.
* **Example of full outer join :**

SELECT students.student\_fname, students.student\_lname, courses.course\_name FROM students LEFT JOIN courses ON students.selected\_course = courses.course\_id

UNION

SELECT students.student\_fname, students.student\_lname, courses.course\_name FROM students RIGHT JOIN courses ON students.selected\_course = courses.course\_id;

* **UNION :** It will give distinct values after combining it from both the tables.
* **CROSS JOIN :** In CROSS JOIN every record in left table will be mapped to every record of the right table . It will multiply the records i.e. if left table has 4 records and right table has 6 records then we will have 24 records.
* **Example of CROSS JOIN :** SELECT \* FROM students JOIN courses;