



JOIN, INNER JOIN AND LEFT JOIN



JULY 12, 2024
SATYA KUMARI. V
ANP-C7970

1. Perform and demonstrate the cross-join between the student and course table.

- SELECT STUDENTID, FIRSTNAME , COURSEID ,
COURSETITLE

FROM STUDENT

CROSS JOIN COURSE;

```
mysql> SELECT studentID, FirstName, courseID, CourseTitle  
-> FROM Student  
-> CROSS JOIN Course;
```

studentID	FirstName	courseID	CourseTitle
5	Satya	1	PHP
4	jhansi	1	PHP
2	satya	1	PHP
1	jagadeesh	1	PHP
5	Satya	2	REACT
4	jhansi	2	REACT
2	satya	2	REACT
1	jagadeesh	2	REACT
5	Satya	3	JAVASCRIPT
4	jhansi	3	JAVASCRIPT
2	satya	3	JAVASCRIPT
1	jagadeesh	3	JAVASCRIPT
5	Satya	4	CSS
4	jhansi	4	CSS
2	satya	4	CSS
1	jagadeesh	4	CSS
5	Satya	5	HTML
4	jhansi	5	HTML
2	satya	5	HTML
1	jagadeesh	5	HTML

20 rows in set (0.00 sec)

2. Perform and demonstrate the inner join on student and score table based on common id.

```
SELECT STUDENT.STUDENTID,  
STUDENT.FIRSTNAME, SCORE.CREDITOBTAINED FROM STUDENT  
INNER JOIN SCORE ON STUDENT.STUDENTID=SCOREID;
```

```
mysql> select student.studentID,student.FirstName,score.CreditObtained  
-> FROM Student  
-> inner join score on student.studentID=score.scoreID;  
+-----+-----+-----+  
| studentID | FirstName | CreditObtained |  
+-----+-----+-----+  
|          1 | jagadeesh |          85.50 |  
|          2 | satya     |          90.00 |  
|          5 | Satya     |          79.50 |  
+-----+-----+-----+  
3 rows in set (0.00 sec)
```

3. perform and demonstrate the left join instructor and student based on common id.

```
INSERT INTO Instructor (FirstName, LastName, Email) VALUES  
( 'siri', 'rani', 'siri.doe@example.com'), ('dummy', 'Smith',  
'jane.smith@example.com'), ('Alice', 'Johnson',  
'alice.johnson@example.com'), ('Bob', 'Brown',  
'bob.brown@example.com'), ('Carol', 'White',  
'carol.white@example.com');
```

```
mysql> INSERT INTO Instructor (FirstName, LastName, Email)
-> values
-> ('siri', 'rani', 'siri.doe@example.com'),
-> ('dummy', 'Smith', 'jane.smith@example.com'),
-> ('Alice', 'Johnson', 'alice.johnson@example.com'),
-> ('Bob', 'Brown', 'bob.brown@example.com'),
-> ('Carol', 'White', 'carol.white@example.com');
Query OK, 5 rows affected (0.29 sec)
Records: 5 Duplicates: 0 Warnings: 0
```

SELECT *

FROM Instructor

LEFT JOIN Student ON Instructor.InstructorID = Student.StudentID;

```
mysql> select * from Instructor
```

```
-> left join student on Instructor.InstructorID= student.studentID;
```

```
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
| InstructorID | FirstName | LastName | Email | studentID |
| FirstName | LastName | DateOfBirth | Gender | Email |
| Phone |
+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+
| 1 | siri | rani | siri.doe@example.com | 1 |
jagadeesh | kola | 2004-01-01 | Male | john.doe@example.com |
123-456-7890 |
| 2 | dummy | Smith | jane.smith@example.com | 2 |
satya | mahesh | 2005-02-02 | Male |
satya_mahesh@example.com | 234-567-8901 |
| 3 | Alice | Johnson | alice.johnson@example.com | NULL |
NULL | NULL | NULL | NULL | NULL | NULL |
|
```

4	Bob	Brown	bob.brown@example.com	4
jhansi	varanasi	2003-04-04	Female	bob.brown@example.com
456-789-0123				

5	Carol	White	carol.white@example.com	5
Satya	varanasi	2001-05-05	Female	carol.white@example.com
567-890-1234				

```

+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+

```

5 rows in set (0.00 sec)

```

mysql> select * from Instructor
-> left join student on Instructor.InstructorID= student.studentID;

```

InstructorID	FirstName	LastName	Email	studentID	FirstName	LastName
1	siri	rani	siri.doe@example.com	1	jagadeesh	kola
2	dummy	Smith	jane.smith@example.com	2	satya	mahesh
3	Alice	Johnson	alice.johnson@example.com	NULL	NULL	NULL
4	Bob	Brown	bob.brown@example.com	4	jhansi	varanasi
5	Carol	White	carol.white@example.com	5	Satya	varanasi

5 rows in set (0.00 sec)

```

mysql> select * from Instructor
-> left join student on Instructor.InstructorID= student.studentID;

```

InstructorID	FirstName	LastName	Email	studentID	FirstName	LastName	DateOfBirth	Gender	Email	Phone
1	siri	rani	siri.doe@example.com	1	jagadeesh	kola	2004-01-01	Male	john.doe@example.com	123-456-7890
2	dummy	Smith	jane.smith@example.com	2	satya	mahesh	2005-02-02	Male	satya_mahesh@example.com	234-567-8901
3	Alice	Johnson	alice.johnson@example.com	NULL	NULL	NULL	NULL	NULL	NULL	NULL
4	Bob	Brown	bob.brown@example.com	4	jhansi	varanasi	2003-04-04	Female	bob.brown@example.com	456-789-0123
5	Carol	White	carol.white@example.com	5	Satya	varanasi	2001-05-05	Female	carol.white@example.com	567-890-1234

5 rows in set (0.00 sec)