

SQL LAB -8

(Table Aliases,Joins,Cross Join)

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Lab 1: Use the Student management system Database and table from our previous lab and write a sql query to achieve the below scenario.

Assume you are managing a university database that tracks student enrollments in various courses. You have two tables, "Student" and "Enrollment". The goal is to retrieve information about each student's ID, first name, last name, and their enrollment details, including the enrollment ID and the associated course ID.

Hint: Use inner join to retrieve data.

```
mysql> use studentmanagementsystem;
Database changed
```

```
mysql> SELECT
->     Student.StudentId,
->     Student.FirstName,
->     Student.LastName,
->     Enrollment.EnrollmentID,
->     Enrollment.CourseID
-> FROM
->     Student
-> INNER JOIN
->     Enrollment
-> ON
->     Student.StudentId = Enrollment.StudentID;
```

StudentId	FirstName	LastName	EnrollmentID	CourseID
102	Ishitha	Iyer	402	202
103	Raman	Bhalla	403	203
104	Ruhi	Khan	404	204
105	Vidyuth	Sahay	405	205

4 rows in set (0.03 sec)

```
mysql> SELECT
->     Student.FirstName,
->     Student.LastName,
->     Course.CourseTitle
-> FROM
->     Student
-> INNER JOIN
->     Enrollment
-> ON
->     Student.StudentId = Enrollment.StudentID
-> INNER JOIN
->     Course
-> ON
->     Enrollment.CourseID = Course.CourseID;
```

```
+-----+-----+-----+
| FirstName | LastName | CourseTitle |
+-----+-----+-----+
| Ishitha   | Iyer     | Physics     |
| Raman     | Bhalla   | Chemistry    |
| Ruhi      | Khan     | Biology     |
| Vidyuth   | Sahay    | Computer Science |
+-----+-----+-----+
4 rows in set (0.04 sec)
```

For getting the total query in a single table

```
mysql> SELECT
->     Student.StudentId,
->     Student.FirstName,
->     Student.LastName,
->     Enrollment.EnrollmentID,
->     Enrollment.CourseID,
->     Course.CourseTitle
-> FROM
->     Student
-> INNER JOIN
->     Enrollment
-> ON
->     Student.StudentId = Enrollment.StudentID
-> INNER JOIN
->     Course
-> ON
->     Enrollment.CourseID = Course.CourseID;
```

StudentId	FirstName	LastName	EnrollmentID	CourseID	CourseTitle
102	Ishitha	Iyer	402	202	Physics
103	Raman	Bhalla	403	203	Chemistry
104	Ruhi	Khan	404	204	Biology
105	Vidyuth	Sahay	405	205	Computer Science

4 rows in set (0.00 sec)

ChatGPT Exercise

Using ChatGPT generates SQL queries of the below problem .

Scenario 1: Imagine you have tables for students and courses. Use an inner join to generate a list of all possible student-course combinations, displaying the student name and course name. We have a "Student" table with the following columns: StudentId, FirstName, LastName and "Course" table with the following columns: CourseId, CourseName and Enrollment table with the following columns: EnrollmentID, StudentID (Foreign key), CourseID (Foreign Key). You want to use inner join to generate a list of all possible student-course combinations. Generate the ChatGPT prompt for the above scenario.

Scenario 1: Imagine you have tables for students and courses. Use an inner join to generate a list of all possible student-course combinations, displaying the student name and course name.

We have a "Student" table with the following columns: StudentId, FirstName, LastName, and a "Course" table with the following columns: CourseId, CourseName, and an "Enrollment" table with the following columns: EnrollmentID, StudentID (Foreign key), CourseID (Foreign Key). You want to use inner join to generate a list of all possible student-course combinations.

SELECT

Student.FirstName,

Student.LastName,

Course.CourseName

FROM

Student

INNER JOIN

Enrollment

ON

Student.StudentId = Enrollment.StudentID

INNER JOIN

Course

ON

Enrollment.CourseID = Course.CourseID;