Lab Performance Report

Only for Course Teacher						
		Needs Improvement	Developing	Sufficient	Above Average	Total Mark
Allocate mark & Percentage		25%	50%	75%	100%	10
Problem Understanding	02					
Analysis	03					
Implementation	03					
Report Writing	02					
					Total obtained mark	
Comments						

Semester: Spring 2025

Student Name: Md Rasheduzzaman Riad

Student ID: 232-35-402

Batch: 41H **Section: H2**

Course Code: SE224 **Course Name: Database Systems lab**

Course Teacher Name: Md. Ashikur Rahman

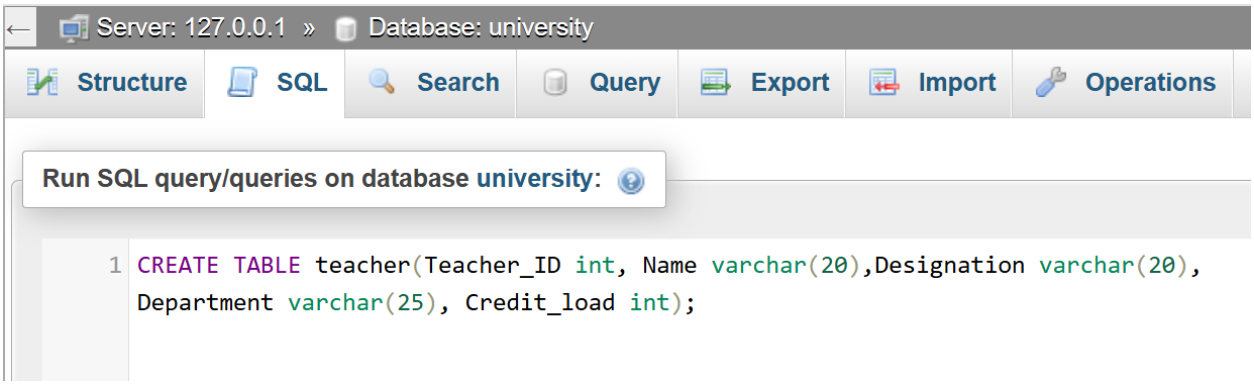
Designation:

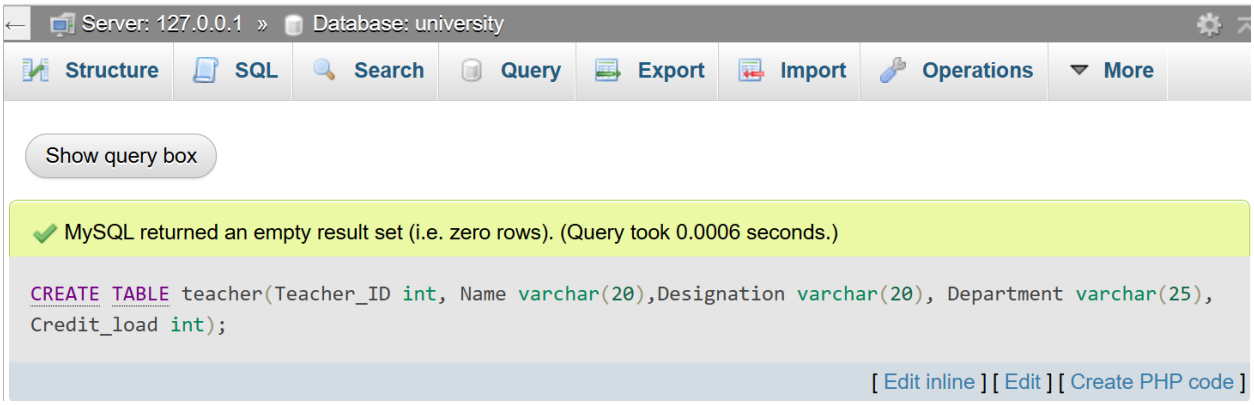
Submission Date: 18/03/2025

1. Create a teacher Table in university database.

2. The schema is (Teacher_ID int , Name varchar ,Designation varchar, Departnebt varchar ,Credit_load int):

   Command: CREATE TABLE teacher(Teacher_Id int, Name varchar(32), Designation varchar(32) ,Department varchar(32),Credit_load int) ;





3. Insert 20 random value in the teacher table :

The following command:

INSERT INTO teacher

VALUES

(1000201, 'Md. Ashikur Rahman', 'Lecturer','Software', 14),

(1000202, 'Saykot Shariar', 'Lecturer','Software', 16),

(1000203, 'Rayhan Rabby', 'Lecturer','Software', 15),

(1000204, 'Rajib mia', 'Professor','Software', 15),

(1000205, 'Nadia sultana', 'Senior Lectural','Software', 18),

(1000206, 'Maliha Mokless', 'Lecturer','Software', 14),

(1000207, 'Maliha sultana', 'Lecturer','Software', 14),

(1000208, 'Bibash', 'Lecturer','Software', 14),

(1000209, 'Nafij', 'Lecturer','Software', 14),

(1000210, 'Munna', 'Lecturer','Tourism', 14),

(1000211, 'Lizon', 'Lecturer','Software', 14),

(1000212, 'Alif', 'Lecturer','Software', 12),

(1000213, 'Hasib', 'Lecturer','Tourism', 14),

(1000214, 'Sihab', 'Lecturer','Software', 14),

(1000215, 'Rifat', 'Lecturer','CSE', 14),

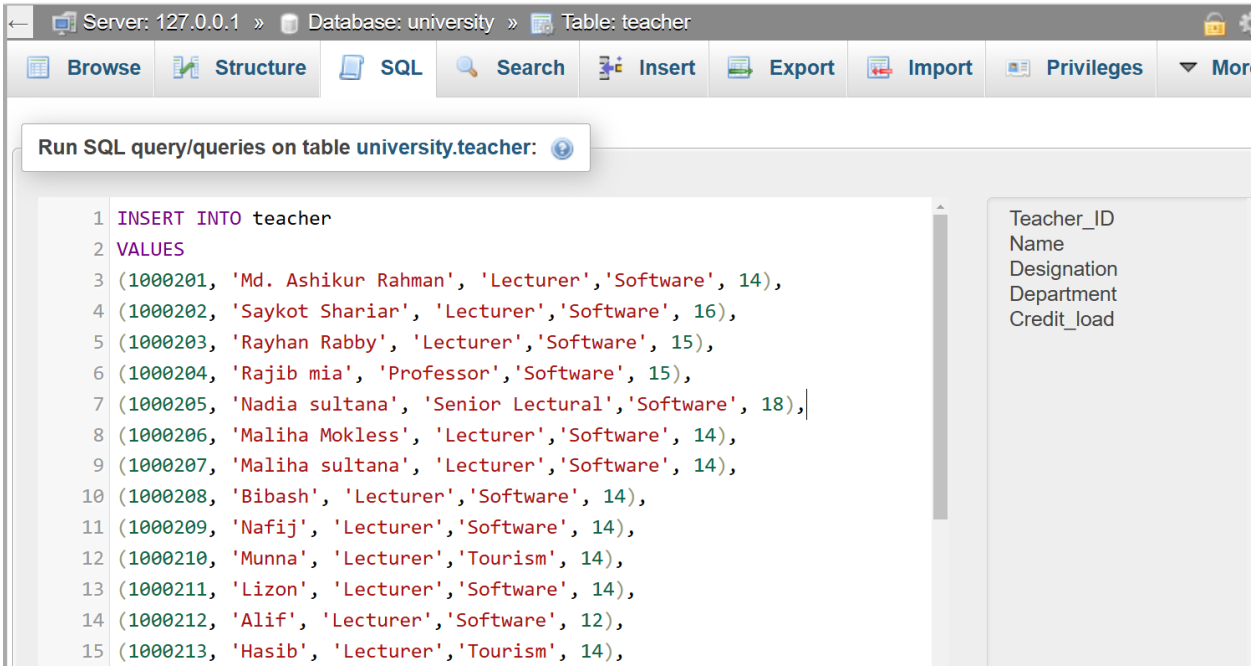
(1000216, 'Emon', 'Lecturer','Software', 14),

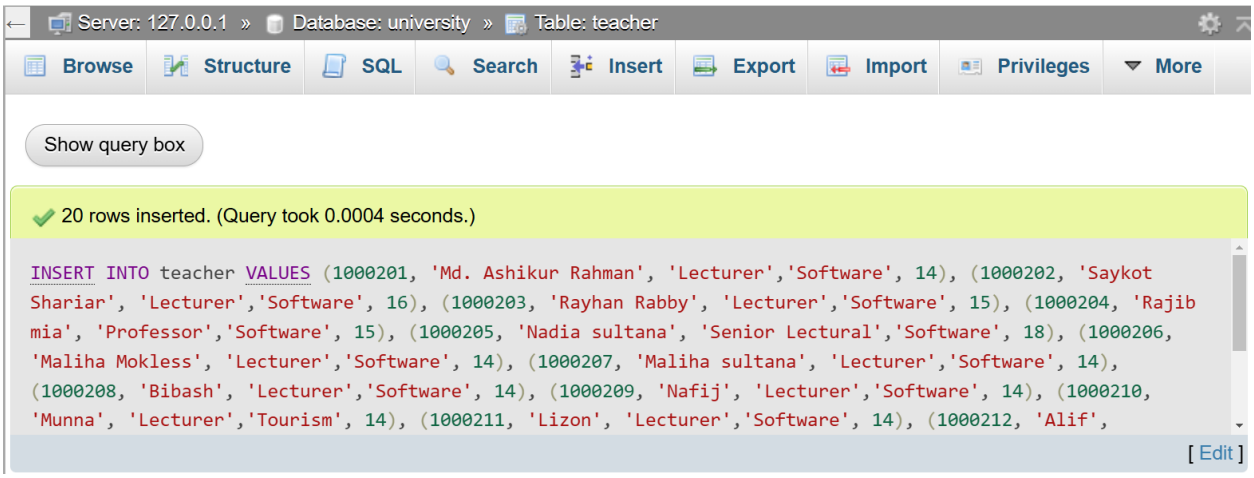
(1000217, 'Lina', 'Lecturer','Software', 14),

(1000218, 'Shawon', 'Lecturer','Software', 14),

(1000219, 'Yousuf', 'Lecturer','Software', 14),

(1000220, 'Sadia', 'Lecturer','Software', 14);



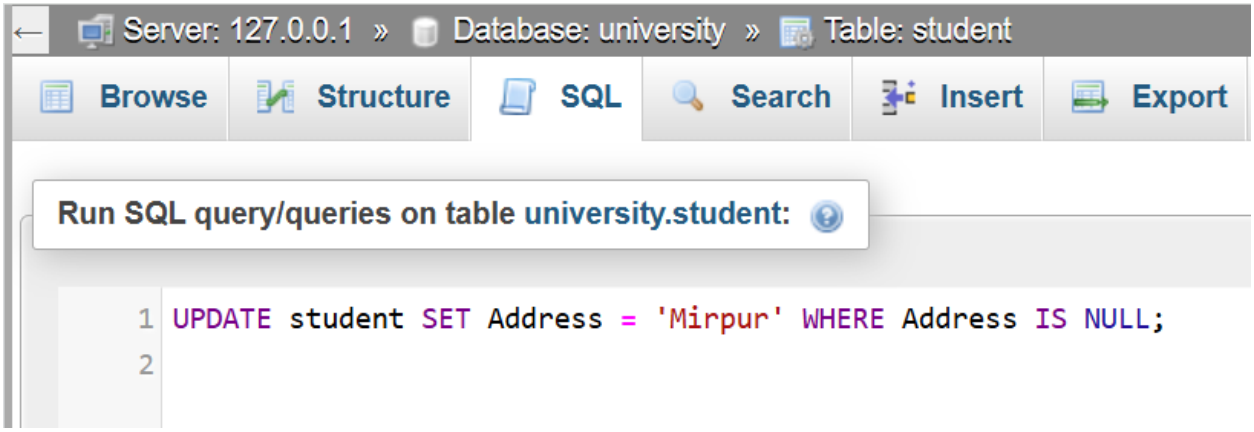


Server: 127.0.0.1 » Database: university » Table: teacher
Browse
Structure
SQL
Search
Insert
Expor

Teacher_ID	Name	Designation	Department	Credit_load
1000201	Md. Ashikur Rahman	Lecturer	Software	14
1000202	Saykot Shariar	Lecturer	Software	16
1000203	Rayhan Rabby	Lecturer	Software	15
1000204	Rajib mia	Professor	Software	15
1000205	Nadia sultana	Senior Lectural	Software	18
1000206	Maliha Mokless	Lecturer	Software	14
1000207	Maliha sultana	Lecturer	Software	14
1000208	Bibash	Lecturer	Software	14
1000209	Nafij	Lecturer	Software	14
1000210	Munna	Lecturer	Tourism	14
1000211	Lizon	Lecturer	Software	14
1000212	Alif	Lecturer	Software	12
1000213	Hasib	Lecturer	Tourism	14
1000214	Sihab	Lecturer	Software	14
1000215	Rifat	Lecturer	CSE	14
1000216	Emon	Lecturer	Software	14
1000217	Lina	Lecturer	Software	14
[illegible]8	Shawon	Lecturer	Software	14

4. Add All student address:

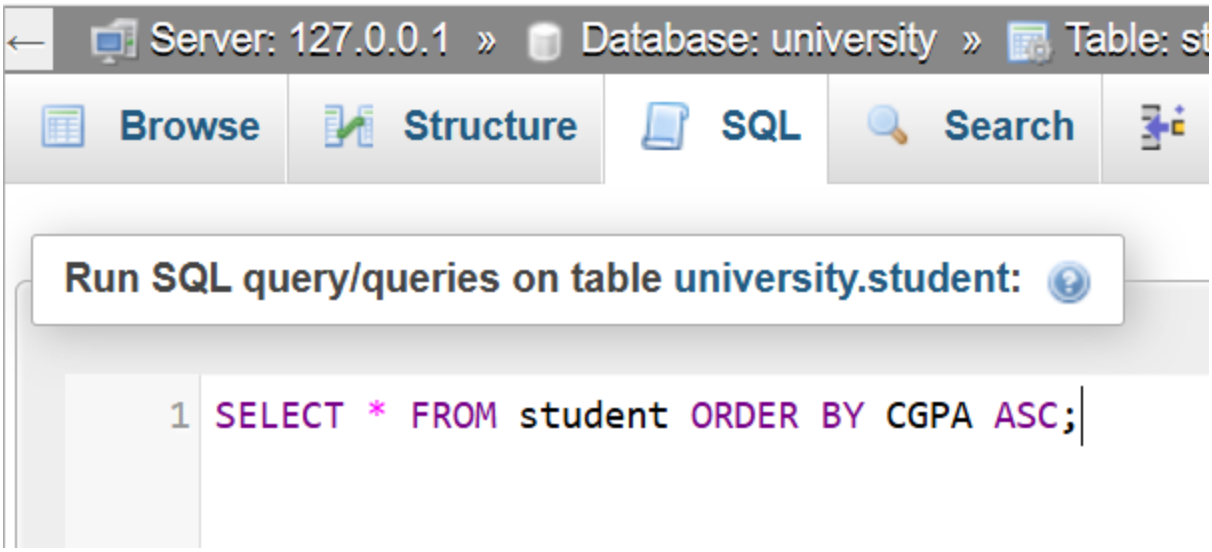
Command : UPDATE students SET Address = 'Mirpur' WHERE Address IS NULL;



Student_ID	Student_Name	Mobile_NO	CGPA	Due	Address
101	Riad	01892857879	3.75	500	Mirpur
102	Sudipto	01892857879	3.89	200	Mirpur
103	Badhon	01892857879	3.45	0	Mirpur
105	Fahim	01892857879	3.25	150	Mirpur
106	Utsho	01892857879	3.60	1000	Mirpur
110	Mim	01892857879	3.90	0	Mirpur
111	Jenny	01892857879	3.50	250	Mirpur
112	Moon	01892857879	3.78	800	Mirpur
116	Minahajul	01892857879	3.95	0	Mirpur
117	Tanjim	01892857879	3.55	700	Mirpur
118	Wasim	01892857879	3.80	300	Mirpur
119	Arafat	01892857879	3.20	600	Mirpur
125	Abrar	01892857879	3.30	900	Mirpur
126	Bitu	01892857879	3.92	50	Mirpur
127	Nafij	01892857879	3.70	350	Mirpur
128	Hasib	01892857879	3.85	100	Mirpur
129	Lizon	01892857879	3.40	450	Mirpur
130	Nayem	01892857879	3.88	400	Mirpur
132	Eva	01892857879	3.65	0	Mirpur

5. Sorting the student table based on the CGPA: The following code:

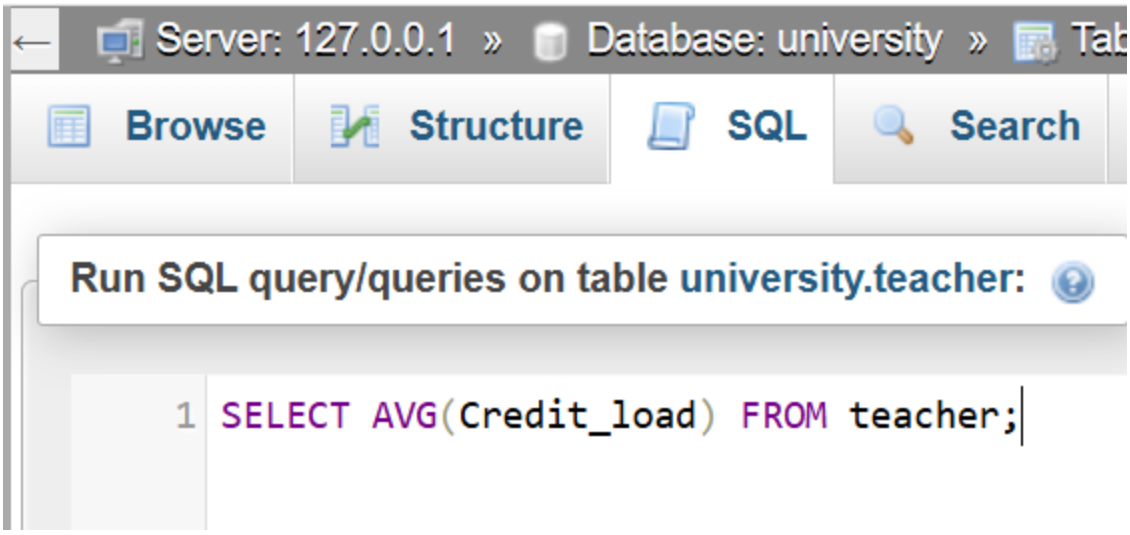
```
SELECT * FROM student ORDER BY CGPA DESC;
```


Server: 127.0.0.1 » Database: university » Table: st
Browse
Structure
SQL
Search
Run SQL query/queries on table university.student:
1 SELECT * FROM student ORDER BY CGPA ASC;

Student_ID	Student_Name	Mobile_NO	CGPA ▲ 1	Due	Address
119	Arafat	01892857879	3.20	600	Mirpur
105	Fahim	01892857879	3.25	150	Mirpur
125	Abrar	01892857879	3.30	900	Mirpur
129	Lizon	01892857879	3.40	450	Mirpur
103	Badhon	01892857879	3.45	0	Mirpur
111	Jenny	01892857879	3.50	250	Mirpur
117	Tanjim	01892857879	3.55	700	Mirpur
106	Utsho	01892857879	3.60	1000	Mirpur
132	Eva	01892857879	3.65	0	Mirpur
127	Nafij	01892857879	3.70	350	Mirpur
101	Riad	01892857879	3.75	500	Mirpur
112	Moon	01892857879	3.78	800	Mirpur
118	Wasim	01892857879	3.80	300	Mirpur
128	Hasib	01892857879	3.85	100	Mirpur
130	Nayem	01892857879	3.88	400	Mirpur
102	Sudipto	01892857879	3.89	200	Mirpur
110	Mim	01892857879	3.90	0	Mirpur
126	Bitu	01892857879	3.92	50	Mirpur
116	Minahajul	01892857879	3.95	0	Mirpur
231	Munna	01892857879	3.99	0	Mirpur

6.

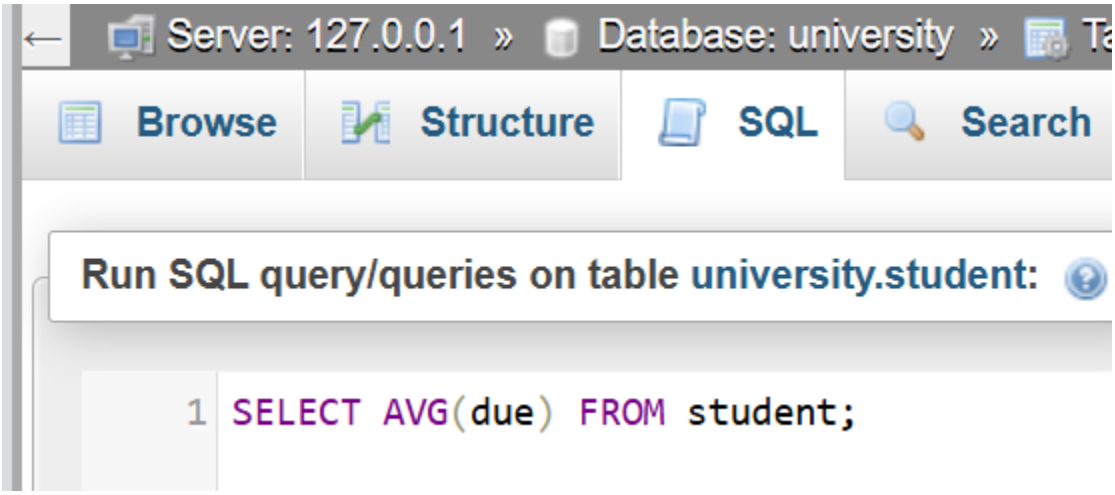
SELECT AVG(Credit_load) FROM teacher;

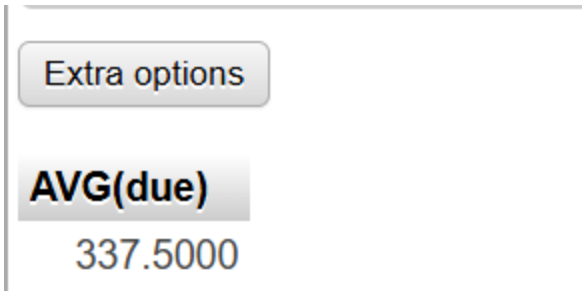


AVG(Credit_load)
14.3000

7.

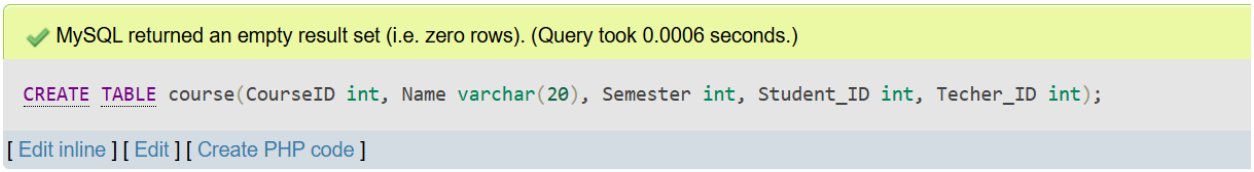
SELECT AVG(due) FROM student;





Create course table:

CREATE TABLE course(CourseID int, Name varchar(20), Semester int, Student_ID int, Techer_ID int);



Insert value in course table

INSERT INTO course (`CourseID`, `Name`, `Semester`, `Student_ID`, `Techer_ID`)

VALUES

(201, 'Riad', 4, 101, 1000201),

(202, 'Sudipto', 4, 102, 1000202),

(203, 'Badhon', 4, 103, 1000201),

(204, 'Fahim', 4, 105, 1000202),

(205, 'Utsho', 4, 106, 1000201);

CourseID	Name	Semester	Student_ID	Techer_ID
201	Riad	4	101	1000201
202	Sudipto	4	102	1000202
203	Badhon	4	103	1000201
204	Fahim	4	105	1000202
205	Utsho	4	106	1000201

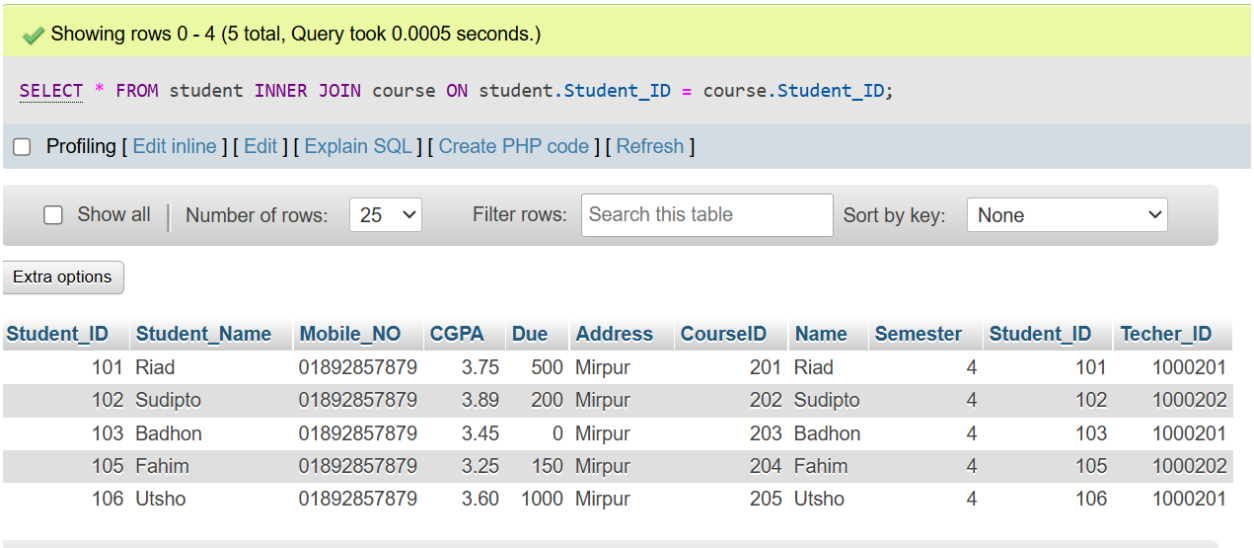
1. Perform Inner Join on Student and Course Table:

SELECT *

FROM student

INNER JOIN course

ON student.Student_ID = course.Student_ID;



Student_ID	Student_Name	Mobile_NO	CGPA	Due	Address	CourseID	Name	Semester	Student_ID	Techer_ID
101	Riad	01892857879	3.75	500	Mirpur	201	Riad	4	101	1000201
102	Sudipto	01892857879	3.89	200	Mirpur	202	Sudipto	4	102	1000202
103	Badhon	01892857879	3.45	0	Mirpur	203	Badhon	4	103	1000201
105	Fahim	01892857879	3.25	150	Mirpur	204	Fahim	4	105	1000202
106	Utsho	01892857879	3.60	1000	Mirpur	205	Utsho	4	106	1000201

2. Perform Right Join on Course and Student Table

SELECT * FROM course RIGHT JOIN student ON

student.Student_ID = student.Student_ID;

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table

Extra options

CourseID	Name	Semester	Student_ID	Techer_ID	Student_ID	Student_Name	Mobile_NO	CGPA	Due	Address
201	Riad	4	101	1000201	101	Riad	01892857879	3.75	500	Mirpur
201	Riad	4	101	1000201	102	Sudipto	01892857879	3.89	200	Mirpur
201	Riad	4	101	1000201	103	Badhon	01892857879	3.45	0	Mirpur
201	Riad	4	101	1000201	105	Fahim	01892857879	3.25	150	Mirpur
201	Riad	4	101	1000201	106	Utsho	01892857879	3.60	1000	Mirpur
201	Riad	4	101	1000201	110	Mim	01892857879	3.90	0	Mirpur
201	Riad	4	101	1000201	111	Jenny	01892857879	3.50	250	Mirpur
201	Riad	4	101	1000201	112	Moon	01892857879	3.78	800	Mirpur
201	Riad	4	101	1000201	116	Minahajul	01892857879	3.95	0	Mirpur
201	Riad	4	101	1000201	117	Tanjim	01892857879	3.55	700	Mirpur
201	Riad	4	101	1000201	118	Wasim	01892857879	3.80	300	Mirpur
201	Riad	4	101	1000201	119	Arafat	01892857879	3.20	600	Mirpur
201	Riad	4	101	1000201	125	Abrar	01892857879	3.30	900	Mirpur
201	Riad	4	101	1000201	126	Bitu	01892857879	3.92	50	Mirpur
201	Riad	4	101	1000201	127	Nafij	01892857879	3.70	350	Mirpur
201	Riad	4	101	1000201	128	Hasib	01892857879	3.85	100	Mirpur
201	Riad	4	101	1000201	129	Lizon	01892857879	3.40	450	Mirpur
201	Riad	4	101	1000201	130	Nayem	01892857879	3.88	400	Mirpur
201	Riad	4	101	1000201	132	Eva	01892857879	3.65	0	Mirpur
201	Riad	4	101	1000201	231	Munna	01892857879	3.99	0	Mirpur
202	Sudipto	4	102	1000202	101	Riad	01892857879	3.75	500	Mirpur
202	Sudipto	4	102	1000202	102	Sudipto	01892857879	3.89	200	Mirpur
202	Sudipto	4	102	1000202	103	Badhon	01892857879	3.45	0	Mirpur
202	Sudipto	4	102	1000202	105	Fahim	01892857879	3.25	150	Mirpur
202	Sudipto	4	102	1000202	106	Utsho	01892857879	3.60	1000	Mirpur

3. Perform Left Join on Teacher and Course Table

SELECT * FROM teacher LEFT JOIN Course ON

teacher.Teacher_ID = Course.`Techer_ID`;

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table

Extra options

Teacher_ID	Name	Designation	Department	Credit_load	CourseID	Name	Semester	Student_ID	Techer_ID
1000201	Md. Ashikur Rahman	Lecturer	Software	14	201	Riad	4	101	1000201
1000202	Saykot Shariar	Lecturer	Software	16	202	Sudipto	4	102	1000202
1000201	Md. Ashikur Rahman	Lecturer	Software	14	203	Badhon	4	103	1000201
1000202	Saykot Shariar	Lecturer	Software	16	204	Fahim	4	105	1000202
1000201	Md. Ashikur Rahman	Lecturer	Software	14	205	Utsho	4	106	1000201
1000203	Rayhan Rabby	Lecturer	Software	15	NULL	NULL	NULL	NULL	NULL
1000204	Rajib mia	Professor	Software	15	NULL	NULL	NULL	NULL	NULL
1000205	Nadia sultana	Senior Lectural	Software	18	NULL	NULL	NULL	NULL	NULL
1000206	Maliha Mokless	Lecturer	Software	14	NULL	NULL	NULL	NULL	NULL
1000207	Maliha sultana	Lecturer	Software	14	NULL	NULL	NULL	NULL	NULL
1000208	Bibash	Lecturer	Software	14	NULL	NULL	NULL	NULL	NULL
1000209	Nafij	Lecturer	Software	14	NULL	NULL	NULL	NULL	NULL
1000210	Munna	Lecturer	Tourism	14	NULL	NULL	NULL	NULL	NULL
1000211	Lizon	Lecturer	Software	14	NULL	NULL	NULL	NULL	NULL
1000212	Alif	Lecturer	Software	12	NULL	NULL	NULL	NULL	NULL
1000213	Hasib	Lecturer	Tourism	14	NULL	NULL	NULL	NULL	NULL
1000214	Sihab	Lecturer	Software	14	NULL	NULL	NULL	NULL	NULL
1000215	Rifat	Lecturer	CSE	14	NULL	NULL	NULL	NULL	NULL
1000216	Emon	Lecturer	Software	14	NULL	NULL	NULL	NULL	NULL
1000217	Lina	Lecturer	Software	14	NULL	NULL	NULL	NULL	NULL
1000218	Shawon	Lecturer	Software	14	NULL	NULL	NULL	NULL	NULL
1000219	Yousuf	Lecturer	Software	14	NULL	NULL	NULL	NULL	NULL
1000220	Sadia	Lecturer	Software	14	NULL	NULL	NULL	NULL	NULL

Show all | Number of rows: 25 Filter rows: Search this table

4. Perform Full Join on Course and Teacher Table

SELECT * FROM course LEFT JOIN teacher ON course.`Techer_ID` = Teacher.Teacher_ID

UNION

SELECT * FROM course RIGHT JOIN teacher ON

course.`Techer_ID` = teacher.Teacher_ID;

Showing rows 0 - 22 (23 total, Query took 0.0010 seconds.)

```
SELECT * FROM course LEFT JOIN teacher ON course.`Techer_ID` = Teacher.Teacher_ID UNION SELECT * FROM course RIGHT JOIN teacher ON course.`Techer_ID` = teacher.Teacher_ID;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 Filter rows: Search this table

Extra options

CourseID	Name	Semester	Student_ID	Techer_ID	Teacher_ID	Name	Designation	Department	Credit_load
201	Riad	4	101	1000201	1000201	Md. Ashikur Rah	Lecturer	Software	14
203	Badhon	4	103	1000201	1000201	Md. Ashikur Rah	Lecturer	Software	14
205	Utsho	4	106	1000201	1000201	Md. Ashikur Rahman	Lecturer	Software	14
202	Sudipto	4	102	1000202	1000202	Saykot Shariar	Lecturer	Software	16
204	Fahim	4	105	1000202	1000202	Saykot Shariar	Lecturer	Software	16
NULL	NULL	NULL	NULL	NULL	1000203	Rayhan Rabby	Lecturer	Software	15
NULL	NULL	NULL	NULL	NULL	1000204	Rajib mia	Professor	Software	15
NULL	NULL	NULL	NULL	NULL	1000205	Nadia sultana	Senior Lectural	Software	18
NULL	NULL	NULL	NULL	NULL	1000206	Maliha Mokless	Lecturer	Software	14
NULL	NULL	NULL	NULL	NULL	1000207	Maliha sultana	Lecturer	Software	14
NULL	NULL	NULL	NULL	NULL	1000208	Bibash	Lecturer	Software	14
NULL	NULL	NULL	NULL	NULL	1000209	Nafij	Lecturer	Software	14
NULL	NULL	NULL	NULL	NULL	1000210	Munna	Lecturer	Tourism	14
NULL	NULL	NULL	NULL	NULL	1000211	Lizon	Lecturer	Software	14
NULL	NULL	NULL	NULL	NULL	1000212	Alif	Lecturer	Software	12
NULL	NULL	NULL	NULL	NULL	1000213	Hasib	Lecturer	Tourism	14
NULL	NULL	NULL	NULL	NULL	1000214	Sihab	Lecturer	Software	14
NULL	NULL	NULL	NULL	NULL	1000215	Rifat	Lecturer	CSE	14
NULL	NULL	NULL	NULL	NULL	1000216	Emon	Lecturer	Software	14
NULL	NULL	NULL	NULL	NULL	1000217	Lina	Lecturer	Software	14
NULL	NULL	NULL	NULL	NULL	1000218	Shawon	Lecturer	Software	14
NULL	NULL	NULL	NULL	NULL	1000219	Yousuf	Lecturer	Software	14
NULL	NULL	NULL	NULL	NULL	1000220	Sadia	Lecturer	Software	14

Console