

DataBase : Database Testing

Table Name : bugresistance

```
CREATE TABLE bugresistance (  
  StudentID int(11) DEFAULT NULL,  
  StudentName varchar(255) DEFAULT NULL,  
  City varchar(255) DEFAULT NULL  
)
```

```
INSERT INTO bugresistance (StudentID, StudentName, City)  
VALUES  
(10, 'Tamim', 'Naogaon'),  
(11, 'Riyad', 'Dhaka'),  
(12, 'Fajle', 'Barisal'),  
(13, 'Rabbi', 'Dhaka'),  
(14, 'Mohammad', 'Tangail'),  
(15, 'Munna', 'Dhaka'),  
(16, 'Rezve', 'Bogra'),  
(17, 'Sahos', 'Noakhali'),  
(18, 'Niloy', 'Dhaka'),  
(19, 'Mohammad Ali', 'Hatiya');
```

Table Name: university

```
CREATE TABLE university (  
    StudentName varchar(255) DEFAULT NULL,  
    UniversityName varchar(255) DEFAULT NULL  
)
```

```
INSERT INTO university (StudentName, UniversityName)  
VALUES  
('Riyad', 'DIU'),  
('Fajle', 'BRAC'),  
('Mohammad Ali', 'AUST'),  
('Rabbi', 'NSU'),  
('Rezve', 'SUST'),  
('Munna', 'IUB'),  
('Sahos', 'AUST'),  
('Niloy', 'DIU'),  
('Rafi', 'IUBAT'),  
('Tamim', 'DIU'),  
('Mohammad', 'BRAC'),  
('khalid', 'DIU'),  
('Akin', 'JU'),  
('Himel', 'DU');
```

LEFT JOIN:

SELECT bugresistance.StudentID, university.StudentName,
bugresistance.City **FROM** bugresistance **LEFT JOIN** university
ON bugresistance.StudentName=university.StudentName;

The screenshot shows the phpMyAdmin interface with a database named 'database-testing'. The 'bugresistance' table is selected. A SQL query is executed, showing 10 rows. The query is: `SELECT bugresistance.StudentID, university.StudentName, bugresistance.City FROM bugresistance LEFT JOIN university ON bugresistance.StudentName=university.StudentName;`

| StudentID | StudentName | City |
|-----------|--------------|-----------|
| 11 | Riyad | Dhaka |
| 12 | Fajle | Barisal |
| 19 | Mohammad Ali | Hatya |
| 13 | Rabbi | Dhaka |
| 16 | Razve | Bogra |
| 15 | Munna | Dhaka |
| 17 | Sahos | Nasrullah |
| 18 | Nitoy | Dhaka |
| 10 | Tamim | Naogaon |
| 14 | Mohammad | Tangail |

RIGHT JOIN:

SELECT Bugresistance.StudentID, University.StudentName,
Bugresistance.City **FROM** Bugresistance **RIGHT JOIN** University
ON Bugresistance.StudentName=University.StudentName;

The screenshot shows the phpMyAdmin interface with a query executed. The query is a RIGHT JOIN between the Bugresistance and University tables on the StudentName column. The results table shows 14 rows, including 10 rows from Bugresistance and 4 rows from University where StudentName is NULL.

| StudentID | StudentName | City |
|-----------|--------------|----------|
| 10 | Tamim | Naogaon |
| 11 | Riyad | Dhaka |
| 12 | Fajle | Barisal |
| 13 | Rabbi | Dhaka |
| 14 | Mohammad | Tangail |
| 15 | Munna | Dhaka |
| 16 | Razve | Bogra |
| 17 | Sahos | Noakhali |
| 18 | Nitoy | Dhaka |
| 19 | Mohammad Ali | Hatiya |
| NULL | Rafi | NULL |
| NULL | khalid | NULL |
| NULL | Akin | NULL |
| NULL | Himel | NULL |

INNER JOIN:

SELECT Bugresistance.StudentID, University.StudentName,
Bugresistance.City **FROM** Bugresistance **INNER JOIN** University
ON Bugresistance.StudentName=University.StudentName;

The screenshot shows the phpMyAdmin interface with a query executed. The query is: `SELECT Bugresistance.StudentID, University.StudentName, Bugresistance.City FROM Bugresistance INNER JOIN University ON Bugresistance.StudentName=University.StudentName;` The result shows 10 rows. The table has columns: StudentID, StudentName, and City.

| StudentID | StudentName | City |
|-----------|--------------|----------|
| 11 | Riyad | Dhaka |
| 12 | Fajle | Barisal |
| 19 | Mohammad Ali | Hatlya |
| 13 | Rabbi | Dhaka |
| 16 | Rezve | Bogra |
| 15 | Murra | Dhaka |
| 17 | Sahos | Noakhali |
| 18 | Niloy | Dhaka |
| 10 | Tamim | Naogaon |
| 14 | Mohammad | Tangail |

FULL OUTER JOIN:

SELECT Bugresistance.StudentID, University.StudentName,
Bugresistance.City **FROM** Bugresistance **LEFT JOIN** University
ON Bugresistance.StudentName=University.StudentName
UNION
SELECT Bugresistance.StudentID, University.StudentName,
Bugresistance.City **FROM** Bugresistance **LEFT JOIN** University
ON Bugresistance.StudentName=University.StudentName;

The screenshot shows the phpMyAdmin interface with a SQL query executed. The query is a FULL OUTER JOIN between the Bugresistance and University tables on the StudentName column. The result shows 10 rows, including data from both tables and the intersection where StudentName matches.

Query: `SELECT Bugresistance.StudentID, University.StudentName, Bugresistance.City FROM Bugresistance LEFT JOIN University ON Bugresistance.StudentName=University.StudentName UNION SELECT Bugresistance.StudentID, University.StudentName, Bugresistance.City FROM Bugresistance LEFT JOIN University ON Bugresistance.StudentName=University.StudentName;`

| StudentID | StudentName | City |
|-----------|--------------|----------|
| 11 | Riyad | Dhaka |
| 12 | Fajle | Barisal |
| 19 | Mohammad Ali | Hatya |
| 13 | Rabbi | Dhaka |
| 16 | Rezve | Bogra |
| 15 | Munna | Dhaka |
| 17 | Sahos | Noakhali |
| 18 | Niloy | Dhaka |
| 10 | Tamim | Naogaon |
| 14 | Mohammad | Tangail |