































Create the University table

```
CREATE TABLE University (  
    StudentName VARCHAR(100) PRIMARY KEY,  
    UniversityName VARCHAR(100),  
    Department VARCHAR(100)  
);
```

Insert records into the University table

```
INSERT INTO University (StudentName, UniversityName, Department) VALUES  
    ('Alice Smith', 'Harvard University', 'Computer Science'),  
    ('Bob Johnson', 'MIT', 'Electrical Engineering'),  
    ('Charlie Brown', 'Stanford University', 'Mechanical Engineering'),  
    ('Diana Prince', 'University of Oxford', 'Physics'),  
    ('Edward Elric', 'University of Tokyo', 'Biotechnology'),  
    ('Fiona Glenanne', 'University of Cambridge', 'Mathematics'),  
    ('George Washington', 'Caltech', 'Aerospace Engineering'),  
    ('Hannah Abbott', 'Yale University', 'Chemistry'),  
    ('Isaac Newton', 'Princeton University', 'Physics'),  
    ('Jack Sparrow', 'University of California, Berkeley', 'Marine Biology');
```

OUTPUT:

				StudentName	UniversityName	Department
<input type="checkbox"/>				Alice Smith	Harvard University	Computer Science
<input type="checkbox"/>				Bob Johnson	MIT	Electrical Engineering
<input type="checkbox"/>				Charlie Brown	Stanford University	Mechanical Engineering
<input type="checkbox"/>				Diana Prince	University of Oxford	Physics
<input type="checkbox"/>				Edward Elric	University of Tokyo	Biotechnology
<input type="checkbox"/>				Fiona Glenanne	University of Cambridge	Mathematics
<input type="checkbox"/>				George Washington	Caltech	Aerospace Engineering
<input type="checkbox"/>				Hannah Abbott	Yale University	Chemistry
<input type="checkbox"/>				Isaac Newton	Princeton University	Physics
<input type="checkbox"/>				Jack Sparrow	University of California, Berkeley	Marine Biology

























Create the Bugresistance table

```
CREATE TABLE Bugresistance (  
    StudentID INT PRIMARY KEY,  
    StudentName VARCHAR(100),  
    City VARCHAR(100),  
    ContactNo VARCHAR(15),  
    Email VARCHAR(100),  
    FOREIGN KEY (StudentName) REFERENCES University(StudentName)  
);
```

Insert records into the Bugresistance table

```
INSERT INTO Bugresistance (StudentID, StudentName, City, ContactNo, Email) VALUES  
(1, 'Alice Smith', 'New York', '123-456-7890', 'alice.smith@example.com'),  
(2, 'Bob Johnson', 'Boston', '234-567-8901', ''),  
(3, 'Charlie Brown', 'San Francisco', '345-678-9012', 'charlie.brown@example.com'),  
(4, 'Diana Prince', 'London', '456-789-0123', 'diana.prince@example.com'),  
(5, 'Edward Elric', 'Tokyo', '567-890-1234', ''),  
(6, 'Fiona Glenanne', 'Cambridge', '678-901-2345', 'fiona.glenanne@example.com'),  
(8, 'Hannah Abbott', 'New Haven', '890-123-4567', ''),  
(9, 'Isaac Newton', 'Princeton', '901-234-5678', 'isaac.newton@example.com');
```

OUTPUT:

		StudentID	StudentName	City	ContactNo	Email
<input type="checkbox"/>	 Edit  Copy  Delete	1	Alice Smith	New York	123-456-7890	alice.smith@example.com
<input type="checkbox"/>	 Edit  Copy  Delete	2	Bob Johnson	Boston	234-567-8901	
<input type="checkbox"/>	 Edit  Copy  Delete	3	Charlie Brown	San Francisco	345-678-9012	charlie.brown@example.com
<input type="checkbox"/>	 Edit  Copy  Delete	4	Diana Prince	London	456-789-0123	diana.prince@example.com
<input type="checkbox"/>	 Edit  Copy  Delete	5	Edward Elric	Tokyo	567-890-1234	
<input type="checkbox"/>	 Edit  Copy  Delete	6	Fiona Glenanne	Cambridge	678-901-2345	fiona.glenanne@example.com
<input type="checkbox"/>	 Edit  Copy  Delete	8	Hannah Abbott	New Haven	890-123-4567	
<input type="checkbox"/>	 Edit  Copy  Delete	9	Isaac Newton	Princeton	901-234-5678	isaac.newton@example.com

INNER JOIN

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

OUTPUT:

StudentID	StudentName	City
1	Alice Smith	New York
2	Bob Johnson	Boston
3	Charlie Brown	San Francisco
4	Diana Prince	London
5	Edward Elric	Tokyo
6	Fiona Glenanne	Cambridge
8	Hannah Abbott	New Haven
9	Isaac Newton	Princeton

LEFT JOIN:

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

OUTPUT:

StudentID	StudentName	City
1	Alice Smith	New York
2	Bob Johnson	Boston
3	Charlie Brown	San Francisco
4	Diana Prince	London
5	Edward Elric	Tokyo
6	Fiona Glenanne	Cambridge
8	Hannah Abbott	New Haven
9	Isaac Newton	Princeton

RIGHT JOIN:

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

OUTPUT:

StudentID	StudentName	City
1	Alice Smith	New York
2	Bob Johnson	Boston
3	Charlie Brown	San Francisco
4	Diana Prince	London
5	Edward Elric	Tokyo
6	Fiona Glenanne	Cambridge
NULL	George Washington	NULL
8	Hannah Abbott	New Haven
9	Isaac Newton	Princeton
NULL	Jack Sparrow	NULL

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 RIGHT JOIN University
ON Bugresistance.StudentName = University.StudentName;
```

OUTPUT:

StudentID	StudentName	City
1	Alice Smith	New York
2	Bob Johnson	Boston
3	Charlie Brown	San Francisco
4	Diana Prince	London
5	Edward Elric	Tokyo
6	Fiona Glenanne	Cambridge
8	Hannah Abbott	New Haven
9	Isaac Newton	Princeton
<i>NULL</i>	George Washington	<i>NULL</i>
<i>NULL</i>	Jack Sparrow	<i>NULL</i>