

Create Database:

-- Switch to the master database to create a new database

USE master;

-- Drop BugResistance database if exists

DROP DATABASE IF EXISTS BugResistance
GO

-- Create a new database named BugResistance

CREATE DATABASE BugResistance;
GO

-- Switch to the newly created database

USE BugResistance;

GO

Create Tables:

-- create a new table called Bugresistance

```
CREATE TABLE Bugresistance (  
  StudentID int,  
  StudentName varchar(255),  
  City varchar(255),  
  PostalCode varchar(255),  
  INCOME varchar(255)  
);
```

-- insert values to the table

```
INSERT INTO Bugresistance (StudentID,  
  StudentName, City, PostalCode, INCOME)  
VALUES  
  (1, 'Akash', 'Dhaka', '1204', '250000'),  
  (2, 'Hossain', 'Rashahi', '1245', '200000'),  
  (3, 'Asmaul', 'Rashahi', '1245', '200000'),  
  (4, 'John', 'NYC', '1249', '210000'),  
  (5, 'Wick', 'California', '1279', '250000');
```

-- create a new table called University

```
CREATE TABLE University(  
  DeptID varchar(50),  
  StudentName varchar(50)  
);
```

-- insert values to the table

```
INSERT INTO University(DeptID, StudentName)  
VALUES  
  ('1', 'Akash'),  
  ('2', 'Hossain'),  
  ('3', 'Asmaul'),  
  ('4', 'IronMan'),  
  ('5', 'BogyMan'),  
  ('6', 'SpiderMan'),  
  ('7', 'John');
```

Showing Tables:

-- Showing the table 1

SELECT * FROM Bugresistance;

	StudentID	StudentName	City	PostalCode	INCOME
1	1	Akash	Dhaka	1204	250000
2	2	Hossain	Rashahi	1245	200000
3	3	Asmaul	Natore	6400	500000
4	4	John	NYC	1249	210000
5	5	Wick	California	1279	250000

-- Showing the table 2

SELECT * FROM University;

	DeptID	StudentName
1	1	Akash
2	2	Hossain
3	3	Asmaul
4	4	IronMan
5	5	BogyMan
6	6	SpiderMan
7	7	John

Inner Join:

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

	StudentID	StudentName	City	DeptID	INCOME
1	1	Akash	Dhaka	1	250000
2	2	Hossain	Rashahi	2	200000
3	3	Asmaul	Natore	3	500000
4	4	John	NYC	7	210000

Left Join:

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

-- Shows all info from LEFT table (Bugresistance)

	StudentID	StudentName	City	DeptID	INCOME
1	1	Akash	Dhaka	1	250000
2	2	Hossain	Rashahi	2	200000
3	3	Asmaul	Natore	3	500000
4	4	John	NYC	7	210000
5	5	NULL	Califomia	NULL	250000

Full Outer Join:

```
SELECT Bugresistance.StudentID,  
University.StudentName, Bugresistance.City,  
University.DeptID, Bugresistance.StudentName  
FROM Bugresistance  
FULL OUTER JOIN University ON  
Bugresistance.StudentName=University.StudentName;
```

	StudentID	StudentName	City	DeptID	StudentName
1	1	Akash	Dhaka	1	Akash
2	2	Hossain	Rashahi	2	Hossain
3	3	Asmaul	Natore	3	Asmaul
4	4	John	NYC	7	John
5	5	NULL	Califomia	NULL	Wick
6	NULL	IronMan	NULL	4	NULL
7	NULL	BogyMan	NULL	5	NULL
8	NULL	SpiderMan	NULL	6	NULL

Right Join:

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

-- Shows all info from RIGHT table (UNIVERSITY)

	StudentID	StudentName	City	DeptID	INCOME
1	1	Akash	Dhaka	1	250000
2	2	Hossain	Rashahi	2	200000
3	3	Asmaul	Natore	3	500000
4	NULL	IronMan	NULL	4	NULL
5	NULL	BogyMan	NULL	5	NULL
6	NULL	SpiderMan	NULL	6	NULL
7	4	John	NYC	7	210000