

## Database Testing

Table 1(Bugresistance Table):

StudentID	StudentName	City	PostalCode	INCOME
101	Rahim	Dhaka	1000	20000
102	Karim	Dhaka	1000	25000
103	Fahim	Khulna	9100	22000
104	Mimi	Khulna	9100	18000
105	Rimi	Sylhet	3100	30000
106	Himi	Sylhet	3100	28000
107	Koli	Rajshahi	6000	19000
108	Izhaan	Coxs Bazaar	4700	20000
109	Fairoz	Rajshahi	6000	25000
110	Nilima	Coxs Bazaar	4700	24000

Table 2(University Table):

ApplicantsID	StudentName	Division
201	Rimi	Sylhet
202	Karim	Dhaka
203	Bodrul	Rajshahi
204	Izhaan	Coxs Bazaar
205	Poli	Barishal
206	Fairoz	Rajshahi
207	Himi	Sylhet
208	Rahim	Dhaka
209	Koli	Rajshahi
210	Jahan	Sylhet
211	Fahim	Khulna
212	Mimi	Khulna
213	Mishti	Rangpur
214	Ritu	Sylhet

Left Outer Join(Query & Output):

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

StudentID	StudentName	City
105	Rimi	Sylhet
102	Karim	Dhaka
108	Izhaan	Coxs Bazaar
109	Fairoz	Rajshahi
106	Himi	Sylhet
101	Rahim	Dhaka
107	Koli	Rajshahi
103	Fahim	Khulna
104	Mimi	Khulna
110	NULL	Coxs Bazaar

Right Outer Join(Query & Output):

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

StudentID	StudentName	City
101	Rahim	Dhaka
102	Karim	Dhaka
103	Fahim	Khulna
104	Mimi	Khulna
105	Rimi	Sylhet
106	Himi	Sylhet
107	Koli	Rajshahi
108	Izhaan	Coxs Bazaar
109	Fairoz	Rajshahi
NULL	Bodrul	NULL
NULL	Poli	NULL
NULL	Jahan	NULL
NULL	Mishti	NULL
NULL	Ritu	NULL

### Full Outer Join(Query & Output):

Run SQL query/queries on database batch12: 

```
1 SELECT Bugresistance.StudentID, University.StudentName, Bugresistance.City
2 FROM Bugresistance
3 LEFT JOIN University ON Bugresistance.StudentName=University.StudentName
4 UNION
5 SELECT Bugresistance.StudentID, University.StudentName, Bugresistance.City
6 FROM Bugresistance
7 RIGHT JOIN University ON Bugresistance.StudentName=University.StudentName;
```

StudentID	StudentName	City
105	Rimi	Sylhet
102	Karim	Dhaka
108	Izhaan	Coxs Bazaar
109	Fairoz	Rajshahi
106	Himi	Sylhet
101	Rahim	Dhaka
107	Koli	Rajshahi
103	Fahim	Khulna
104	Mimi	Khulna
110	NULL	Coxs Bazaar
NULL	Bodrul	NULL
NULL	Poli	NULL
NULL	Jahan	NULL
NULL	Mishti	NULL
NULL	Ritu	NULL