

Practical 6

Aim: Based on the Library Information System Database, perform the following SQL queries on JOIN operations

1. Display the ISBN of all the books that have been issued. Fetch the ISBN from table book_copies and issue details from table book_issue.

```
SELECT isbn_no FROM book_copies inner join book_issue ON  
book_issue.accession_no=book_copies.accession_no;
```

	isbn_no character varying (13) 🔒
1	9789351199380
2	9789351199380
3	9789351197584
4	9789351197584
5	9789386601407
6	9789351343202
7	9789351343202
8	9788131773383
9	9788131773383
10	9788131705216
Total rows: 21 of 21 Query complete 00:00:00.230	

2. JOIN tables students and departments and print all department names where student roll_no is LIKE '%1_'.

```
SELECT DISTINCT department_name FROM departments left join students on  
departments.department_code=students.department_code WHERE roll_no LIKE  
'%1';
```

	department_name character varying (80) 🔒
1	Electrical Engineering
2	Computer Science
3	Master Of Computer Application
4	Mechanical Engineering

3. Perform RIGHT JOIN operation to join tables members & faculty and print member_type and faculty name.

```
SELECT members.member_type,faculty.faculty_fname,faculty.faculty_lname FROM  
members right join faculty on members.id=faculty.id WHERE faculty.id LIKE  
'FCS%';
```

	member_type character varying (2)	faculty_fname character varying (80)	faculty_lname character varying (80)
1	FC	Sanchit	Jain
2	FC	Sumanta	Kuiley
3	FC	Shantanu	Kuiley
4	FC	Arpita	Das

4. Perform RIGHT JOIN operation to join tables members & faculty
 SELECT * FROM members right join faculty on members.id=faculty.id WHERE
 faculty.id LIKE 'FCS%';

	member_no character varying (20)	member_class character varying (20)	member_type character varying (2)	roll_no character varying (20)	id character varying (20)	faculty_fname character varying (80)	faculty_lname character varying (80)
1	M0053	Faculty	FC	[null]	FCS01	Sanchit	Jain
2	M0054	Faculty	FC	[null]	FCS02	Sumanta	Kuiley
3	M0055	Faculty	FC	[null]	FCS03	Shantanu	Kuiley
4	M0056	Faculty	FC	[null]	FCS04	Arpita	Das

5. Use FULL OUTER JOIN to join tables students and departments. Then print the
 student name and department building.
 SELECT
 students.student_fname,students.student_lname,departments.department_building
 FROM students full outer join departments on
 students.department_code=departments.department_code WHERE
 departments.department_name='Computer Science'

	student_fname character varying (80)	student_lname character varying (80)	department_building character varying (80)
1	Vikas	Das	Block_1
2	David	Rajak	Block_1
3	John	Chattarjee	Block_1
4	Robert	Junior	Block_1
5	Arup	Layek	Block_1
6	Susmita	Das	Block_1
7	Soma	Gorai	Block_1
8	Suman	Kumari	Block_1
9	Payel	Mandal	Block_1
10	Puja	Biswas	Block_1
Total rows: 16 of 16		Query complete 00:00:00.088	

Results: Based on the Library Information System Database, perform the following SQL queries on JOIN operations were successfully performed

Marking Scheme:

CRITERIA	TOTAL MARKS	MARKS OBTAINED	COMMENTS
CONCEPT (A)	2		
IMPLEMENTATION (B)	2		
PERFORMANCE (C)	2		
TOTAL	6 (TO BE SCALED DOWN TO 1.5)		