

School of Computer Science Engineering and Technology

Course- BTech

Type- Core

Course Code- CSET201

Course Name- Information Management System

Year- 2022

Semester- Odd

Date- 29/08/2022

Batch- 2021-2025

LAB 4

CO-Mapping

Exp No.	Name	CO1	CO2	CO3
03	Join Operators	✓	---	✓

Objectives

1. Students will be able to learn join operators.
2. Student will be able to learn inner join, left join, self-join, right join operator.
3. Student will be able to learn aggregate functions.

Courses

Course_code	Course_title	Credits	Semester	Instructor_id
CS301	DBMS	4	3	101
CS302	OS	3	3	102
CS101	Physics	3	1	103
CS303	java	3	3	104
CS505	Discrete Math	4	5	105
CS701	Cloud Computing	3	7	106
EC303	DLD	2	5	107
MBA501	Economics	3	5	108

Datatypes Used:

```
Course_code varchar();  
Course_title varchar();  
Credits int;  
Semester int;  
Instructor_id int;
```

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Instructors

Instructor_id	Instructor_name	Department
101	Ashish	CSE
102	Shivam	CSE
103	Ravi	ME
104	Sujit	CSE
105	Alka	CSE
106	Suman	CSE
107	Mukund	EC
108	Rohit	MBA
109	Divyanshu	MBA
110	Abhijit	LAW

Datatypes Used :

Instructor_id **int**;
Instructor_name **varchar()**;
Department **varchar()**;

Students

Registration_id	S_Name	Semester	Course_code	Age	Instructor_id
SCS012	Arjun	3	CS301	17	101
SCS013	Anamika	3	CS301	19	101
SCS012	Divya	3	CS302	20	102
SCS014	Diya	1	CS101	19	103
SCS015	Abhishek	3	CS303	17	104
SCS090	Shiva	3	CS303	16	104
SCS071	Rahul	5	CS505	21	105
SCS022	Alam	5	MBA501	21	108
SCS056	Satya	7	CS701	23	106

Datatype Used:

Registration_id **Varchar()**;
S_name **Varchar()**;
Semester **int**;
Course_code **Varchar()**;
Age **int**;
Instructor_id **int**;

School of Computer Science Engineering and Technology

Experience

Instructor_id	Experience
101	0
102	1
103	3
104	5
105	1
106	0
107	0
108	6
109	5
110	5

Datatype Used:

Instructor_id int;

Experience int;

Questions:

1. Find the name of instructors who are teaching the Courses in course table.
2. Display the all the instructor with no experience.
3. Find out the name of students who are taught by the instructors having experience more than 3 years. (using left and right join)
4. Display all name of instructor with maximum experience.
5. Find the name of faculty and students involve in DBMS or OS.
6. How many instructors are teaching no students?
7. Find out the name, experience, department of the instructor along with the registration id of the student who are involve in the DLD subject.
8. Display the average age of the student studying DBMS.
9. Perform the left join on instructors table and student's table. Identify the null values.
10. Perform left join on instructors table and student's table. Count the total number of rows in the table.