

School of Computer Science Engineering and Technology

Course- BTech

Type- Core

Course Code- CSET201

Course Name- Information Management System

Year- 2022

Semester- Odd

Date- 05/09/2022

Batch- 2021-2025

LAB 5

CO-Mapping

| Exp No. | Name | CO1 | CO2 | CO3 |
|---------|-------------|-----|-----|-----|
| 05 | Sub-queries | ✓ | --- | ✓ |

Objectives

1. Students will be able to learn sub queries.
2. Student will be able to learn IN, ANY, Exist, Not exist 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**;

School of Computer Science Engineering and Technology

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: (Solve the questions using Sub Queries)

1. Find the details of all the instructors with no experience.
2. Find out the name of students who are taught by the instructors having experience more than 3 years.
3. Display the name of instructor with maximum experience.
4. Find the name of students who are either studying Java, DBMS or OS.
5. How many instructors are teaching no students?
6. Update the age of all the students by 1 are in semester 3.
7. Find the name of all the instructor whose experience is greater than the experience of instructor_id 105.
8. Find the average age of students in each semester. Round off the average values.