



Institute of Computer Engineering Technology



iCET Certified Master

ASSIGNMENT

Assignment	WEEK 05 - DBMS
Name	SQL JOINS
Ass. Date	15th December 2023

01) Create following **Student** and **student_contact** tables and insert all records.

student_id	first_name	last_name
1	Kamal	Perera
2	Nimal	Samson
3	Amal	Perera
4	Roy	Silva

student_id	email_address	contact
1	kamal@school.edu	77234512
2	nimal@school.edu	77456396
3	amal@school.edu	77743566

02) Write SQL Query to return student_id, first_name, contact of all students.

03) Write a query to retrieve the student_id, first_name of Students along with their respective email address as Email.

04) Write a query to retrieve the student_id, first_name and last_name together as full_name of Students along with their respective email address.

[Use **SELECT CONCAT (column1, ' ', column2)** to concatenate two strings into a single string.]

05) Write a query to retrieve the student_id, first_name of Students along with their respective email address with student names end with 'mal'.

06) Create following **DepartmentInfo**, **StudentInfo** and **CourseInfo** tables and insert all records.

DepartmentID	DepartmentName
101	Computer Science
102	Mathematics
103	History

StudentID	StudentName	DepartmentID
1	Alice	101
2	Bob	102
3	Carol	101
4	Dave	103

CourseID	CourseName	DepartmentID
1	Database Systems	101
2	Calculus	102
3	World History	103

07) Write a query to retrieve the name of students along with the names of their respective departments.

08) Create a query to display all students, including those who are not enrolled in any department. Return student names and their department names if they are enrolled.

09) Write an SQL query to display all departments, including those that have no students. Return department names and the names of students if they are enrolled in a department.

- 10) Calculate the total number of students in each department. Display department names and the count of students for each department.
- 11) Retrieve the names of students, the courses they are taking, and the department that offers each course. Use the "StudentInfo," "CourseInfo," and "DepartmentInfo" tables.
- 12) Retrieve the names of students who are enrolled in the "Computer Science" department.
- 13) Find departments with more than one student and list their names and the number of students.
- 14) Retrieve the names of students who are enrolled in the "Computer Science" department and are taking a course with the name "Database Systems."
- 15) Create following **Author**, **Book** and **Reader** tables and insert all records.

AuthorID	AuthorName	Country
1	John Smith	USA
2	Emily Brown	UK
3	Maria Lopez	Spain

ReaderID	ReaderName	BookID
101	Alice	1
102	Bob	2
103	Carol	3
104	David	1

BookID	Title	AuthorID	PublicationYear
1	The Book of Life	1	2020
2	Secrets Revealed	2	2019
3	Mystery Tales	1	2022
4	Spanish Cuisine	3	2021

- 16) Write a query to calculate the total number of books published by each author. Display the author's name and the total number of books. Exclude authors who haven't published any books.
- 17) Display the author's name and the publication year. Exclude authors who haven't published any books.
- 18) Retrieve the titles of books, publication year and author's name published before the year 2020. Display the book title and publication year.
- 19) Retrieve name of the readers with the titles of books read by readers with ReaderIDs 101 and 102. Display the book title and the reader's name.
- 20) Retrieve name of the readers with the titles of books read by readers with ReaderIDs 101 and 102 and BookID 2. Display the book title and the reader's name.