



COMSATS University Islamabad Lahore Campus

Final-Term LAB Examination – Fall 2023

Course Title:	Database Systems I	Course Code:	CSC371	CreditHours(3+1)
Course Instructor/s:	Khaqan zaheer	Programme	BS Software Engineering	
Semester:	4 th	Batch:	SP22	Section: A
		Date:	22-12-23	
Time Allowed:	90 Minutes	Maximum Marks:	50	
Student's Name:		Reg.		
Important Instructions / Guidelines: <ul style="list-style-type: none">• Answer all questions.• Write your answers concisely.• You may use SQL commands to retrieve the required information from the given tables.• Ensure your SQL commands are syntactically correct.• The tables used for this examination are provided below.• Save your script file with your full registration number. And make sure it must be submitted within 90 minutes.				

Question 1: {Blooms Taxonomy Learning Level --Applying[CLO5] [Marks50]

- I. Write an SQL query to retrieve the first and last names of employees who are Analysts and have a salary greater than 60000.
- II. Design a new table named **Customers** with attributes: CustomerID (Primary Key), FirstName, LastName, Email, and PhoneNumber. Provide a sample record.
- III. Write an SQL query to find the project with the earliest start date, displaying the ProjectID, ProjectName, and StartDate.
- IV. Create a stored procedure named **GetTaskDetails** that takes a **TaskID** as input and returns the details (TaskDescription, HoursWorked) of the corresponding task from the Tasks table.
- V. Write an SQL query to concatenate the FirstName and LastName columns of employees and display them as a new column named **FullName**.
- VI. Write an SQL query to calculate the average HoursWorked for all tasks.
- VII. Insert a new employee with EmployeeID = 4, FirstName = 'Emma', LastName = 'Brown', Age = 22, Position = 'Intern' into the Employees table.
- VIII. Write an SQL query to retrieve the ProjectName, TaskDescription, and HoursWorked for each task, including the corresponding project name.
- IX. Write an SQL query to find the project with the highest total hours worked on tasks, displaying the ProjectID, ProjectName, and total HoursWorked.
- X. Write an SQL query to update the EndDate of ProjectA to '2023-11-15'.

Note:

Upload your script file (queries only with numbers) on google classroom named as:
"Final – Lab – SP22-BSE-A"

Best of Luck

[PTO for reference tables]

Tables:**Employees Table:**

EmployeeID	FirstName	LastName	Age	Position	Salary
1	Sara	Johnson	28	Manager	80000
2	John	Smith	25	Developer	65000
3	Alice	Davis	30	Analyst	55000

Projects Table:

ProjectID	ProjectName	StartDate	EndDate
201	ProjectA	2023-07-01	2023-12-31
202	ProjectB	2023-08-15	2024-02-29
203	ProjectC	2023-06-10	2023-11-20

Tasks Table:

TaskID	ProjectID	EmployeeID	TaskDescription	HoursWorked
1	201	1	Design UI	15
2	201	2	Develop Backend	25
3	202	3	Data Analysis	20