

Faculty of Computing

Year 2 Semester 1 (2025)

IT2140- Database Design and Development

Lab Sheet 02

Lab Sheet 02: SQL Table Joining

Objective

At the end of this lab session, students should be able to join tables and retrieve meaningful information by using INNER JOIN with related columns from multiple tables.

Exercises 1

Write SQL queries for the following — see **Data_Set.sql** for reference

- (a) Make a list of the employee ID, name, and the department ID(s) they are working in.
- (b) List the department names and the IDs of employees assigned to each.
- (c) Display the names of employees along with the names of the departments they are working in.
- (d) List the employee names and salaries for those who work in departments with a budget greater than 1,000,000.
- (e) Find the names of departments where employees spend more than 40% of their time.

Exercises 2

Write SQL queries for the following— see **Data_Set.sql** for reference

- (a) How many employees are working in each department? List the department ID and the number of employees.
- (b) How many employees are working in each department? List the department name and the number of employees.
- (c) Which departments have more than 2 employees assigned to them? List the department IDs only.
- (d) List all departments that have more than 2 employees assigned. Show the department name along with the number of employees and sort the result in ascending order of employee count.

Submission Requirement:

Complete **Exercises 2** of this lab sheet and upload your SQL query answers to the **Git repository** provided by your instructor **before end of the day**.

File Naming Guidelines:

- Name your submission file as:
Lab_2_Exercises_2.sql

Additional Instructions:

- Ensure your SQL queries are well-formatted and include comments where necessary.
- Test your queries before uploading to confirm they run without errors.
- Commit and push your file to the correct Git repository and branch as instructed.