

## IT2140 - Database Design and Development

Department of Information Technology, Faculty of Computing

## Year 2 semester 1 (2025)

## **Tutorial 08**

## Learning outcomes:

 Understand and apply basic relational algebra operations such as selection, projection, and join on a given relational schema.

Consider the following schema and write relational algebra statements to cater the given queries

Department (deptNo, dname, location, mgrID)

- 1. Print names of all employees.
- 2. Print names of employees working for "Administration" department.
- 3. Print names of employees working for 'Administration' department and getting a salary  $> \text{Rs.}\ 50,000$ .
- 4. Print names of all employees and assigned department's name.
- 5. Print names of employees managing 'Administration' or 'Sales' department.
- 6. Print names of employees managing 'Administration' and 'Sales' department.
- 7. Print names of employees managing 'Administration' but not 'Sales' department.
- 8. Print the names of employees who does not hold a managerial position.
- 9. Print department name and number of employees in each department.

- 10. Print department name and number of employees only if the number of employees is greater than 10.
- 11. Find the department having highest number of employees working in it.
- 12. Print the name of the department in which all employees working in the department is having a salary greater than 30000.