

# IT2140 - Database Design and Development

Department of Information Technology, Faculty of Computing

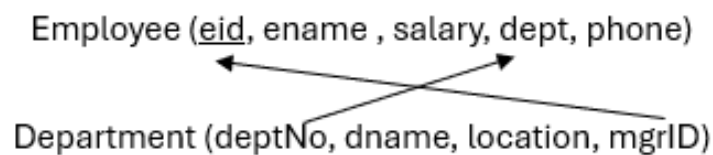
## Year 2 semester 1 (2025)

### Tutorial 02

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#### Learning outcomes:

- Create relational tables with appropriate constraints (e.g., NOT NULL, CHECK)
- Perform data manipulation using INSERT, UPDATE, and DELETE statements
- Modify table structures and enforce referential integrity using foreign key constraints
- Write SELECT queries to retrieve, filter, sort, from tables



1. Create the Employee table Department tables with following constraints

- (a) Employees' name cannot be null
- (b) Employees' salary should be greater than zero
- (c) Department location can be 'Colombo', 'Kandy' or 'Galle'

**\*\* Do not add the foreign key constraints to the table at this point**

2. Insert following rows to the Employee table

eid	ename	salary	dept	phone
E0001	Kumari	45000	3	0112123456
E0002	Anushka	63000	1	0112123457
E0003	Anura	27000	2	0112123458
E0004	Niranjala	36000	3	0112123459
E0005	Sampath	50000	1	0112123450

3. Insert the following rows to the Department table

deptNo	dname	location	mgrID
1	Administration	Colombo	E0002
2	Sales	Kandy	E0002
3	Finance	Colombo	E0005

4. Add the foreign key constraints to the created tables.
5. Add a column named bdate to the employee table to store the birth dates of employees.
6. Update the salary of Kumari to 35000.
7. Delete Sampath from Employee table.
8. Display the employee names and their salaries sorted by their names.
9. Display the names of the employees who obtain a salary greater than 50,000.
10. Display the employee's name and the id of the department he/she is working in.