
Principles of Programming

CT4029

Workbook – Session 5

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Section A

1. Question 1:

Create an employee database with the following attributes and enter sample data (at least 6 unique entries with at least 2 Managers):

- ID
- First_Name
- Last_Name
- Department
- Phone
- Role

2. Question 2:

Retrieve all the records from your database

3. Question 3:

Retrieve all the records where role of an employee is Manager

4. Question 4:

Update the record of a Manager and change his/her role to technician

5. Question 5:

Delete record of an employee with a role “technician”

6. Question 6:

Extend your database by adding multiple relevant tables (employee and department) and associating them with foreign keys. Answer the following questions:

- Retrieve all the employees from the IT department
- Retrieve information of managers from the IT department
- Deleting record of an employee who is a manager in IT department

7. Question 7:

Create a GUI that registers Employee based on their: id, name, email, and password and save them into a database. After Employee registration, the GUI needs to ask the user to login with his/her Employee account registered. The application needs to check if the details provided are registered in the database, if not an access denied message needs to be displayed on the GUI.