

Python_Activity17

Database Design and SQL Query Challenge






Objective:

This activity helps trainees understand **databases, SQL queries, and data management** by designing a database and writing queries.

Activity 1: Build Your Own Database (Group Activity)

Instructions:

1. Choose a Business or Organization

- Each group selects one of the following and builds a database for it:
 -  **Library System** (Track books, members, and loans)
 -  **Hospital Database** (Store patient, doctor, and treatment records)
 -  **Retail Store Inventory** (Manage products, suppliers, and stock levels)
 -  **School Management System** (Track students, courses, and teachers)
 -  **Restaurant Ordering System** (Manage customers, orders, and menu items)

2. Define Your Database Structure

- Create **2-3 related tables** for the business.
- Assign **Primary Keys (PK)** and **Foreign Keys (FK)** to connect tables.

3. Write SQL Queries

- **Create tables** using `CREATE TABLE` .
- **Insert sample data** using `INSERT INTO` .
- **Retrieve data** using `SELECT` .
- **Update records** using `UPDATE` .
- **Delete records** using `DELETE` .

4. Present Your Work

- Each group **explains their database structure** and **demonstrates sample queries**.
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Note:

- *Give me your best output*
- *Add what you think is needed*