

Exercise: Cybersecurity Incident Response System



Objective: Create a cybersecurity incident response system using SQLite3 in Python. The system should be able to:

1. Create tables for incidents, actions, and systems.
2. Insert data into the tables.
3. Query data to retrieve information.
4. Update records in the tables.
5. Delete records from the tables.

Steps:

1. Setup SQLite3 and Create a Database:

- Install SQLite3 if not already installed.
- Create a database file named `cybersec_incident_response.db`.

2. Create Tables:

- Create an incidents table with columns: `id`, `incident_type`, `description`, `reported_date`, `status`.

- Create an actions table with columns: id, incident_id, action_description, action_date, analyst_name.
- Create a systems table with columns: id, system_name, ip_address, status.

3. Insert Data:

- Insert sample data into all tables.

4. Query Data:

- Retrieve and print all incidents.
- Retrieve and print all actions related to a specific incident.
- Retrieve and print all systems.

5. Update Records:

- Update the status of an incident.
- Update the status of a system.

6. Delete Records:

- Delete an action record.
- Delete a system record.