Topic 8 - Activities

Lab 01

Open the following web page and do all the Python SQLite Database Exercises. Try not to peek at the solutions until you have tries them yourself:

https://w3resource.com/python-exercises/sqlite/index.php

Lab 02

Using the Login UI you created in Lab01 of Module 8 Lab Exercise, complete the following exercise.

1. Create a SQLite database called *login.db* .
2. Create a table called *TProfiles with* the following fields:
    a. user_name (text)
    b. Password (text)
3. Add a few records to this table
4. Use this table to validate the login values entered by the user using the above Login UI
5. How would you handle invalid login credentials?

Lab 03

1. Create an Employee class in Python with the following attributes:
    a. employee_id
    b. full_name
    c. email
    d. tel_num
2. Add the following methods to the class:
    a. __str ()__ : to display all attribute values of Employee object)
    b. getName () : to return only the full name of an Employee object
3. Create Python module with the following functions:
    a. createDatabase(db_name) # creates a SQLite database to store Employee records
    b. createEmployeeTable(table_name) # Creates a Table to store Employee records (columns must match the attributes defined in above Employee class
    c. addEmployeeToDB(employee_object) # adds an Employee object to database
    d. getEmployees () # returns a List of Employee objects in the Employee Table
    e. getEmployee(emp_id) # returns the relevant Employee object from Employee table
    f. UpdateEmployee(employee_object) # updates an employee record in Employee table

g. DeleteEmployee(emp_id) # deleted relevant Employee record from Employee table

4. Create some Employee objects and test your above methods.