

A Python SQL Login Signup/ Login System

1) The Signup Function

This function uses an INSERT query to add a user to a users table (tbl_users) and then a SELECT query to get the user ID (primary key) of the entry just created. This user ID is assigned to a global variable (var_UID) which can then be used in inner join queries to get data associated with that user from other tables in the database. Use keyboard inputs to get the required user data:

```
def signup():
    print("Please enter the following details.")
    var_FName = str(input("First Name: "))
    var_LName = str(input("Last Name: "))
    var_password1 = str(input("Choose a password: "))
    var_password2 = str(input("Please confirm password: "))
```

As before in the SQL menu system you have to append variable values to an array variable (var_insert) and then concatenate the array variable at the end of the SQL INSERT query.

```
var_insert = []
var_insert.append(var_FName)
var_insert.append(var_LName)
var_insert.append(var_password1)
with sqlite3.connect('db_food') as db:
    cursor = db.cursor()
    cursor.execute('insert INTO tbl_users (fld_Firstname, fld_Lastname, fld_password)VALUES(?,?, ?);', var_insert)
    db.commit()
```

With regard to the SELECT query, please ensure you have seen the syntax. Notice the cursor.execute line which has the array variable concatenated to the sql variable and that it is **not** placed in the SQL statement in the line above. You cannot place the array variable at the end of the SQL SELECT query as in all other queries without causing an error.

```
with sqlite3.connect('db_food') as db:
    sql = 'SELECT * FROM tbl_users WHERE fld_Firstname =? AND fld_Lastname = ? AND fld_password = ?';
    cursor.execute(sql, var_insert)
    result = cursor.fetchall()
    for row in result:
```

2) The Login Function

This function uses an identical SELECT query process to get the user ID of an already existing user. Once again the user ID is assigned to a global variable (var_UID).

```
def login():
    print("Please enter the following details.")
    var_FName = str(input("First Name: "))
    var_LName = str(input("Last Name: "))
    var_password1 = str(input("Password: "))
    var_select = []
    var_select.append(var_FName)
    var_select.append(var_LName)
    var_select.append(var_password1)
    with sqlite3.connect('db_food') as db:
        cursor = db.cursor()
        # Again - note the positioning array variable in the cursor.execute line.
        sql = 'SELECT * FROM tbl_users WHERE fld_Firstname =? AND fld_Lastname = ? AND fld_password = ?';
        cursor.execute(sql, var_select)
        result = cursor.fetchall()
        for row in result:
            #print ("ID: " + str(row[0]) + ", Item: " + str(row[1]) + ", Cost:" + str(row[2]))
            global var_UID
            var_UID = int(row[0])
            print(var_UID)
```