Instructions

This application will read roster data in JSON format, parse the file, and then produce an SQLite database that contains a User, Course, and Member table and populate the tables from the data file.

You can base your solution on this code: http://www.py4e.com/code3/roster/roster.py - this code is incomplete as you need to modify the program to store the **role** column in the **Member** table to complete the assignment.

Each student gets their own file for the assignment. Download this file and save it as `roster_data.json`. Move the downloaded file into the same folder as your `roster.py` program.

Once you have made the necessary changes to the program and it has been run successfully reading the above JSON data, run the following SQL command:

```
SELECT User.name,Course.title, Member.role FROM
    User JOIN Member JOIN Course
    ON User.id = Member.user_id AND Member.course_id = Course.id
    ORDER BY User.name DESC, Course.title DESC, Member.role DESC LIMIT 2;
```

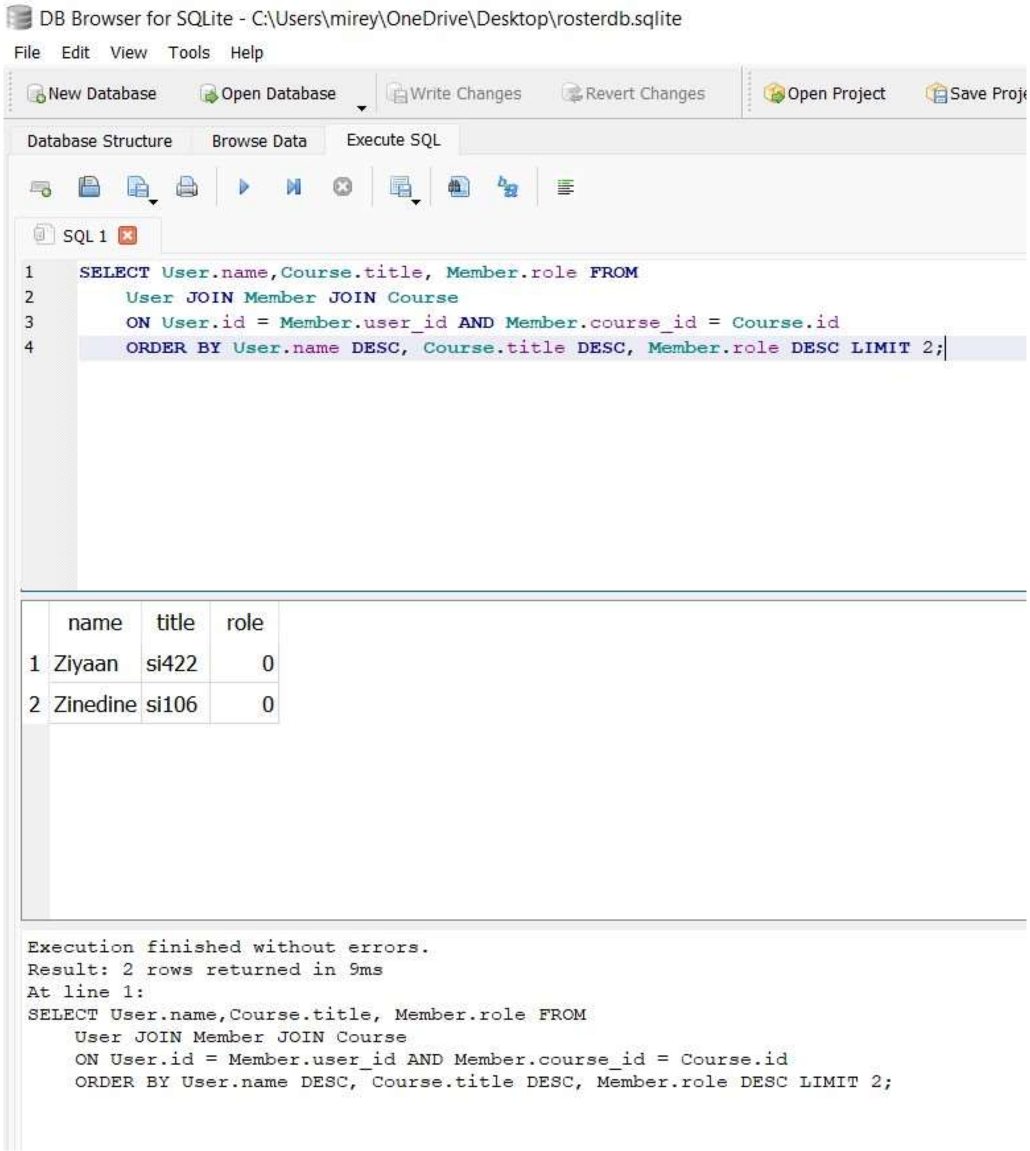
The output should look as follows:

```
Ziyaan|si422|0
Zinedine|si106|0
```

Once that query gives the correct data, run this query:

```
SELECT 'XYZZY' || hex(User.name || Course.title || Member.role ) AS X FROM
    User JOIN Member JOIN Course
    ON User.id = Member.user_id AND Member.course_id = Course.id
    ORDER BY X LIMIT 1;
```

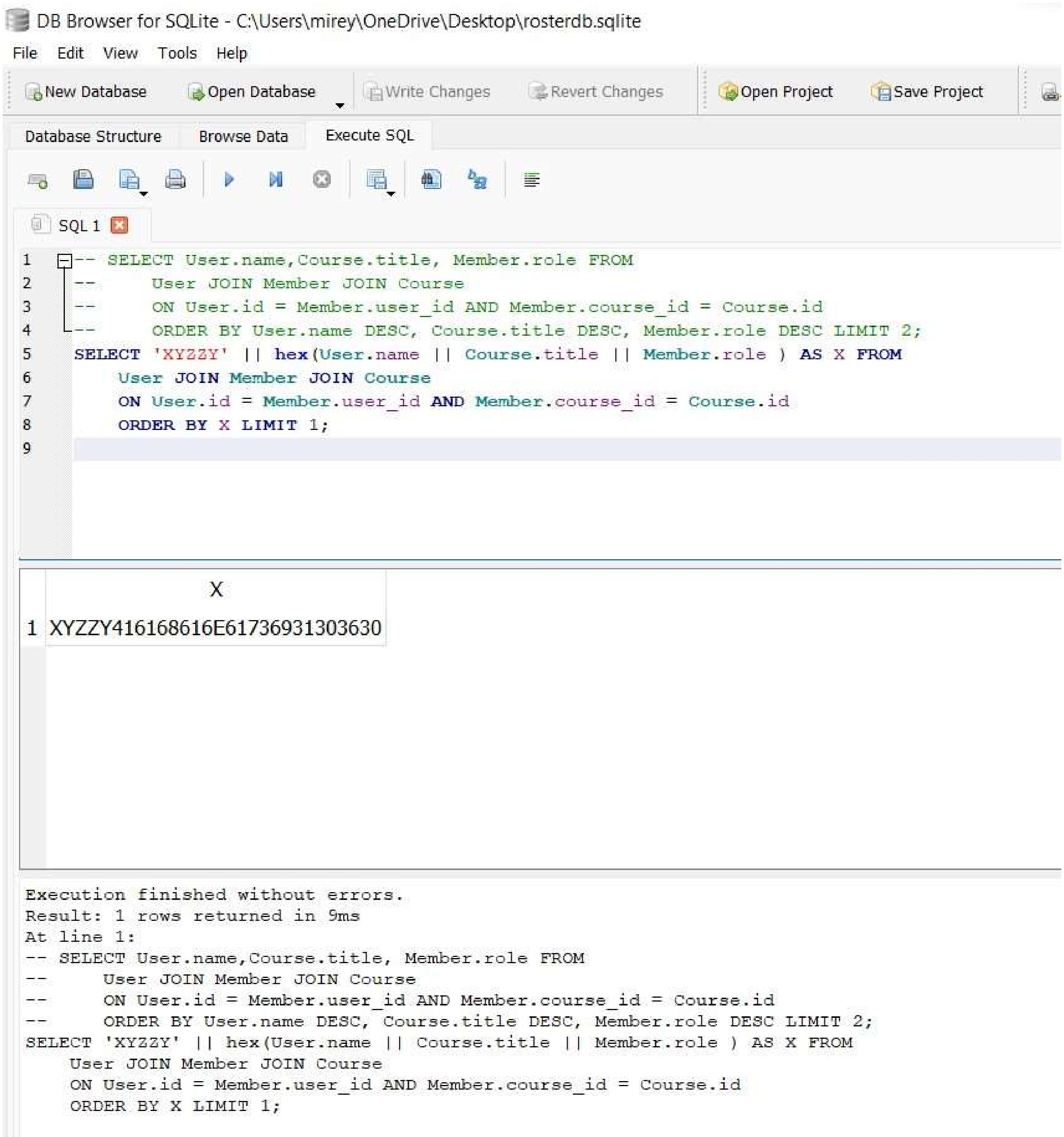
You should get one row with a string that looks like **XYZZY53656C696E613333**.



```
SELECT User.name,Course.title, Member.role FROM
    User JOIN Member JOIN Course
    ON User.id = Member.user_id AND Member.course_id = Course.id
    ORDER BY User.name DESC, Course.title DESC, Member.role DESC LIMIT 2;
```

	name	title	role
1	Ziyaan	si422	0
2	Zinedine	si106	0

```
Execution finished without errors.
Result: 2 rows returned in 9ms
At line 1:
SELECT User.name,Course.title, Member.role FROM
    User JOIN Member JOIN Course
    ON User.id = Member.user_id AND Member.course_id = Course.id
    ORDER BY User.name DESC, Course.title DESC, Member.role DESC LIMIT 2;
```



```sql
-- SELECT User.name,Course.title, Member.role FROM
--     User JOIN Member JOIN Course
--     ON User.id = Member.user_id AND Member.course_id = Course.id
--     ORDER BY User.name DESC, Course.title DESC, Member.role DESC LIMIT 2;
SELECT 'XYZZY' || hex(User.name || Course.title || Member.role ) AS X FROM
    User JOIN Member JOIN Course
    ON User.id = Member.user_id AND Member.course_id = Course.id
    ORDER BY X LIMIT 1;
```

	X
1	XYZZY416168616E61736931303630

```
Execution finished without errors.
Result: 1 rows returned in 9ms
At line 1:
-- SELECT User.name,Course.title, Member.role FROM
--     User JOIN Member JOIN Course
--     ON User.id = Member.user_id AND Member.course_id = Course.id
--     ORDER BY User.name DESC, Course.title DESC, Member.role DESC LIMIT 2;
SELECT 'XYZZY' || hex(User.name || Course.title || Member.role ) AS X FROM
    User JOIN Member JOIN Course
    ON User.id = Member.user_id AND Member.course_id = Course.id
    ORDER BY X LIMIT 1;
```