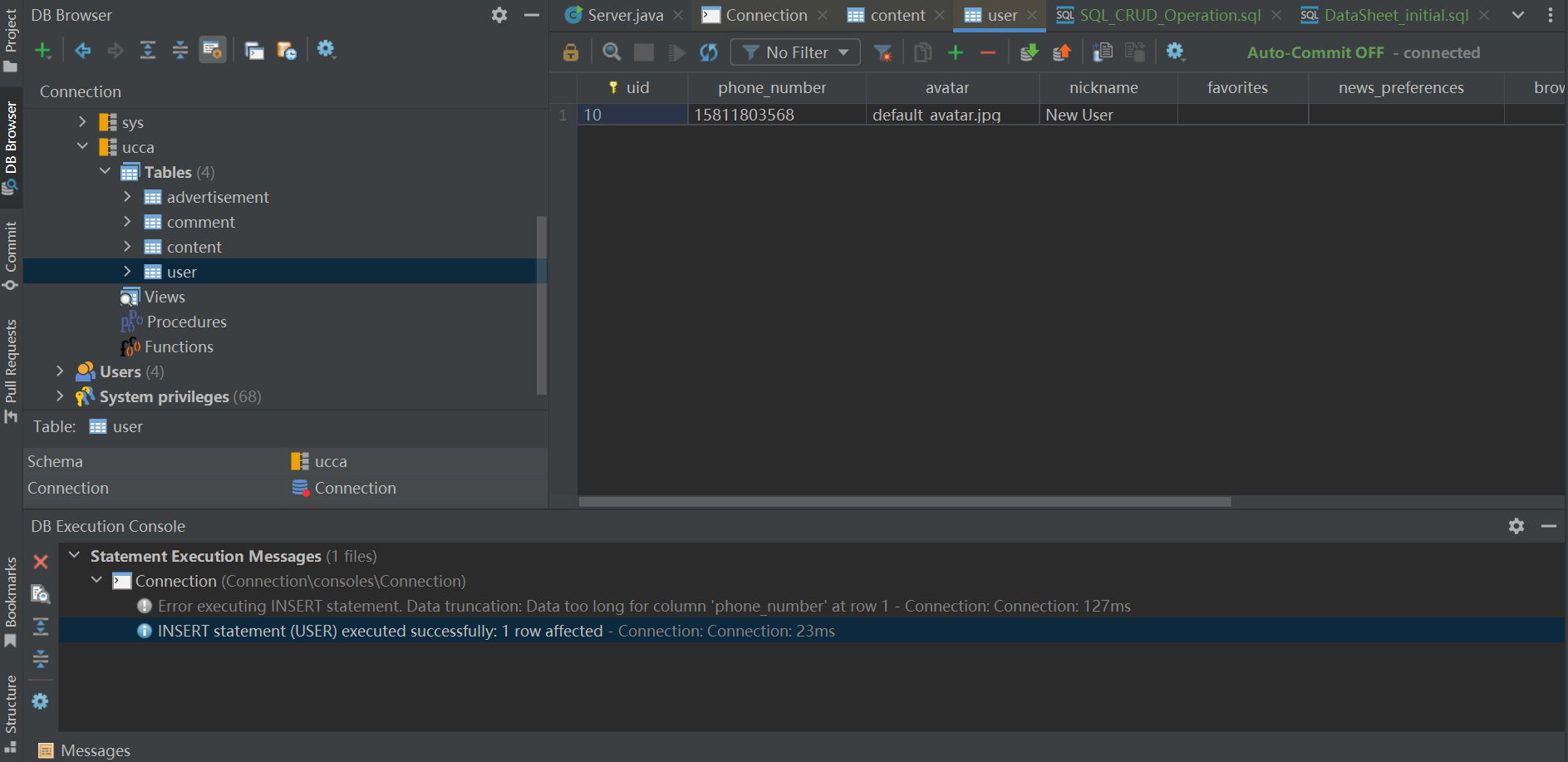
Task 1: SQL CRUD Operations

* 1. For the command input, please see the file: “SQL\_CRUD\_Operation.sql”
  2. Output:

--Create User by Email

INSERT INTO User (uid, phone\_number, avatar, nickname, last\_login\_time)

VALUES (10/\*DEFAULT\*/, '15811803568', 'default\_avatar.jpg', 'New User', NULL);

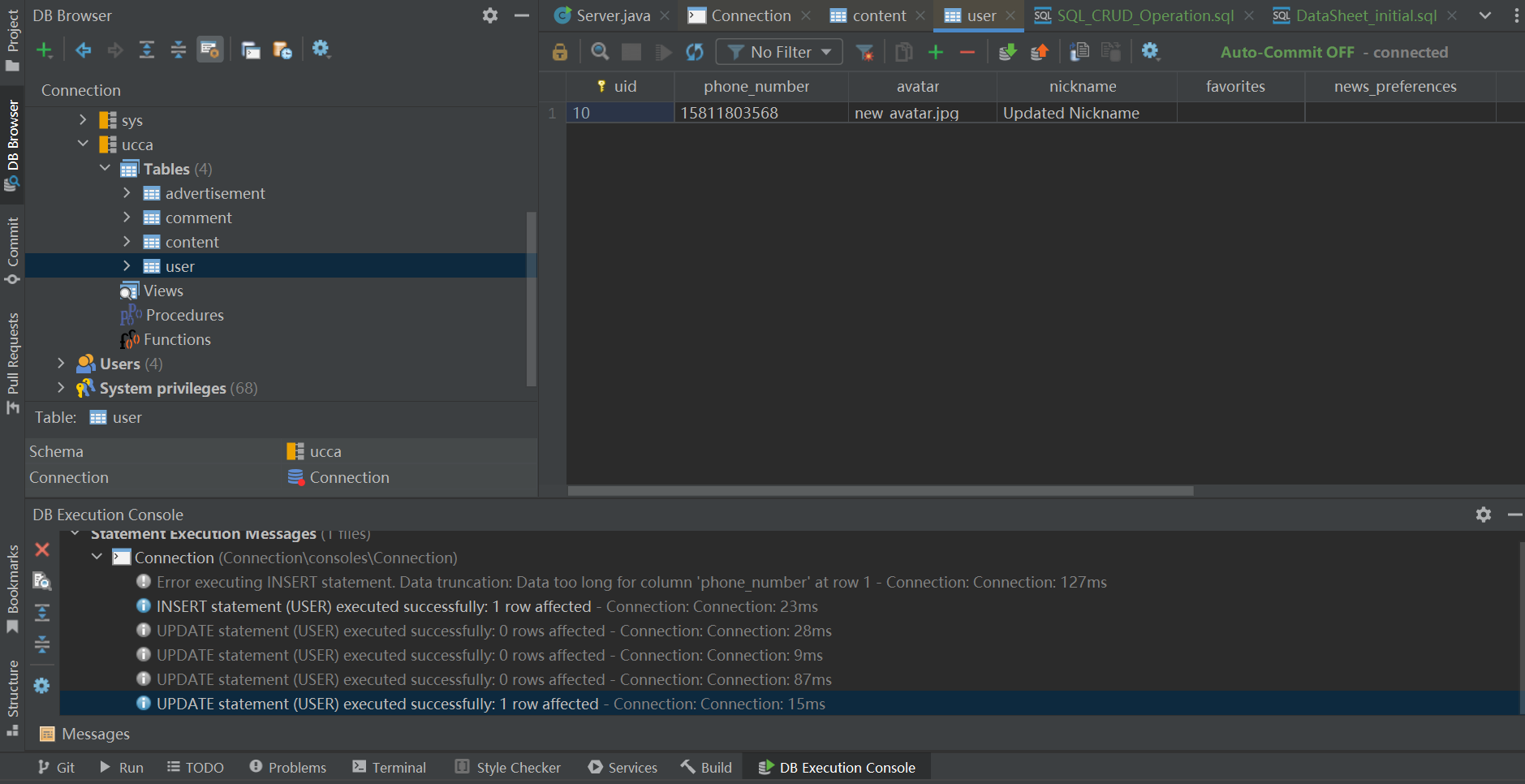


--Edit User Account Information

UPDATE User

SET nickname = 'Updated Nickname', avatar = 'new\_avatar.jpg'

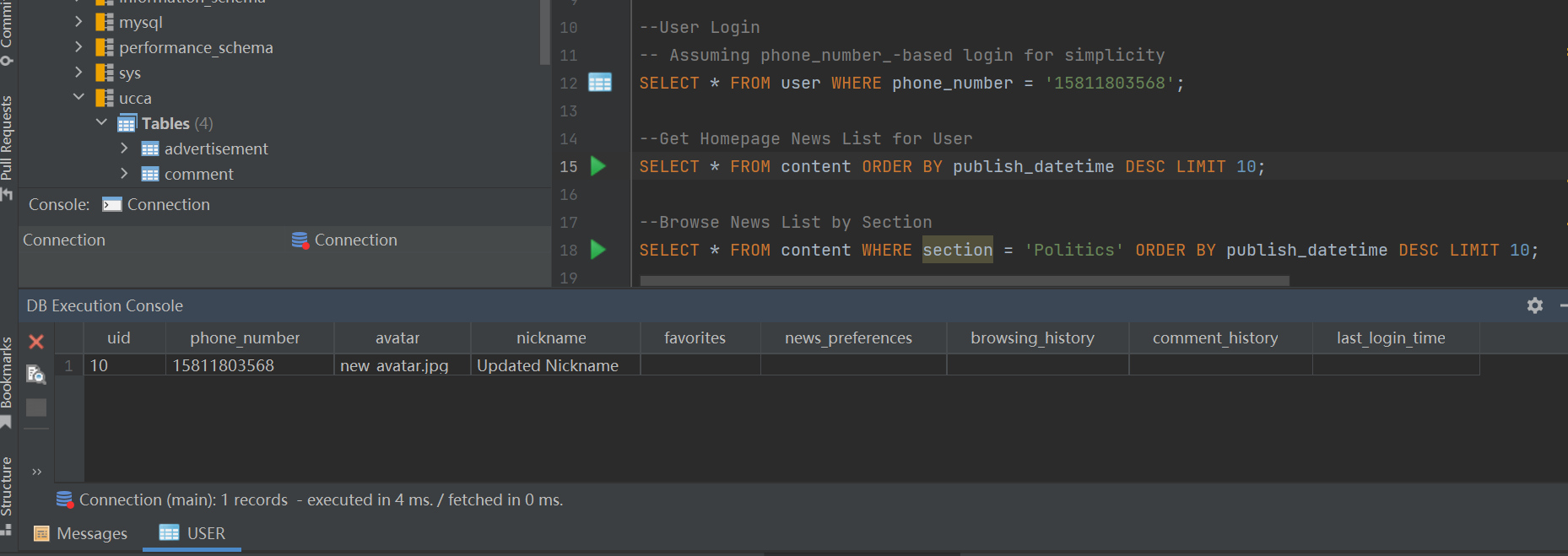
WHERE uid = 10;



--User Login

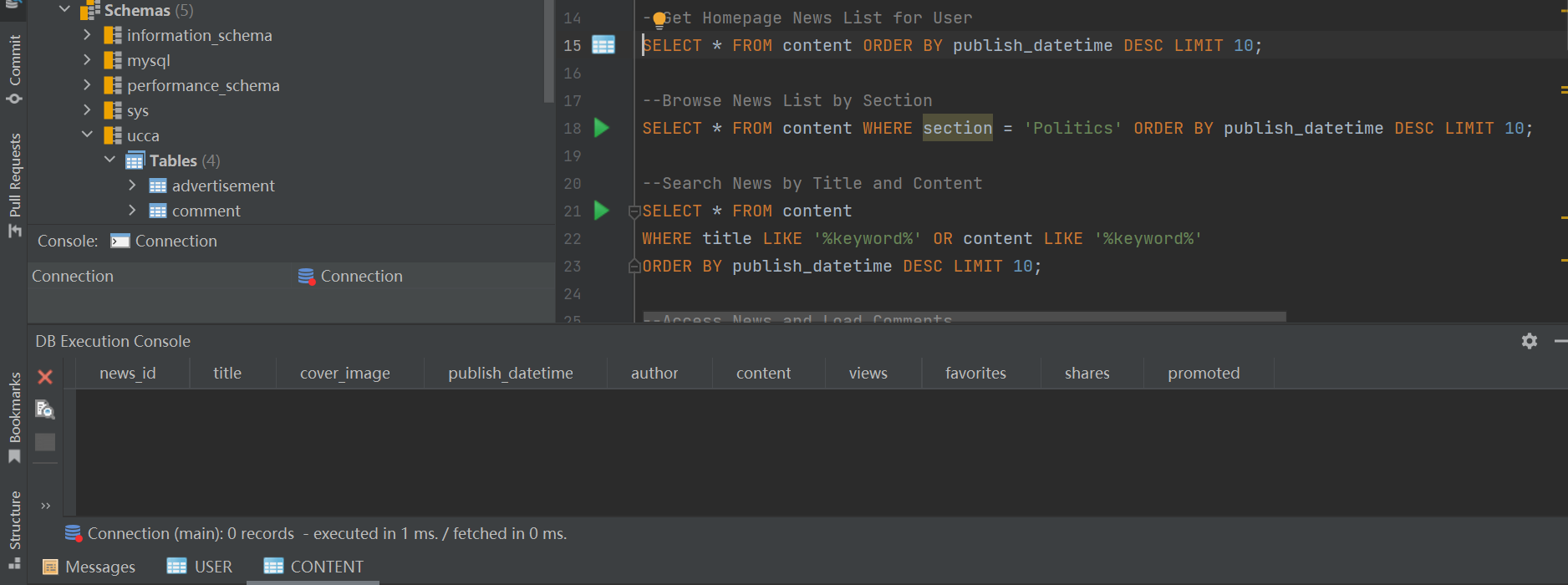
-- Assuming phone\_number\_-based login for simplicity

SELECT \* FROM user WHERE phone\_number = '15811803568';



--Get Homepage News List for User

SELECT \* FROM content ORDER BY publish\_datetime DESC LIMIT 10;

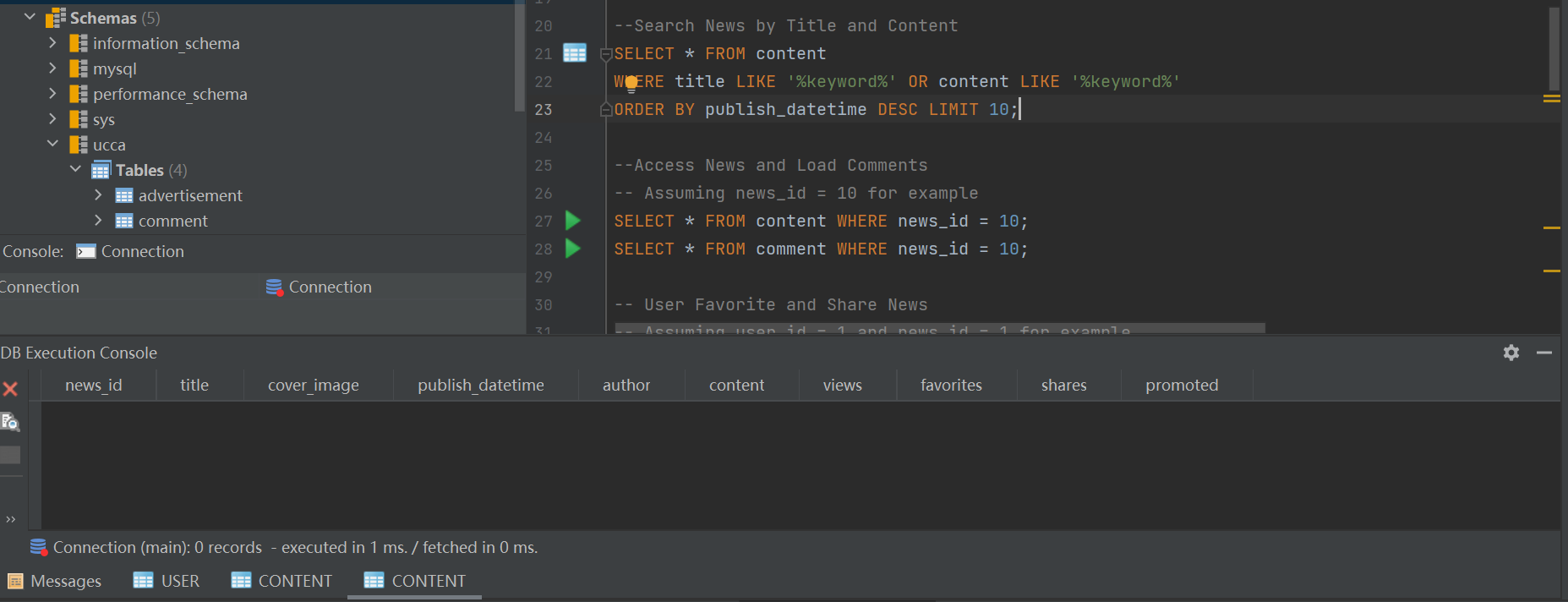


--Search News by Title and Content

SELECT \* FROM content

WHERE title LIKE '%keyword%' OR content LIKE '%keyword%'

ORDER BY publish\_datetime DESC LIMIT 10;

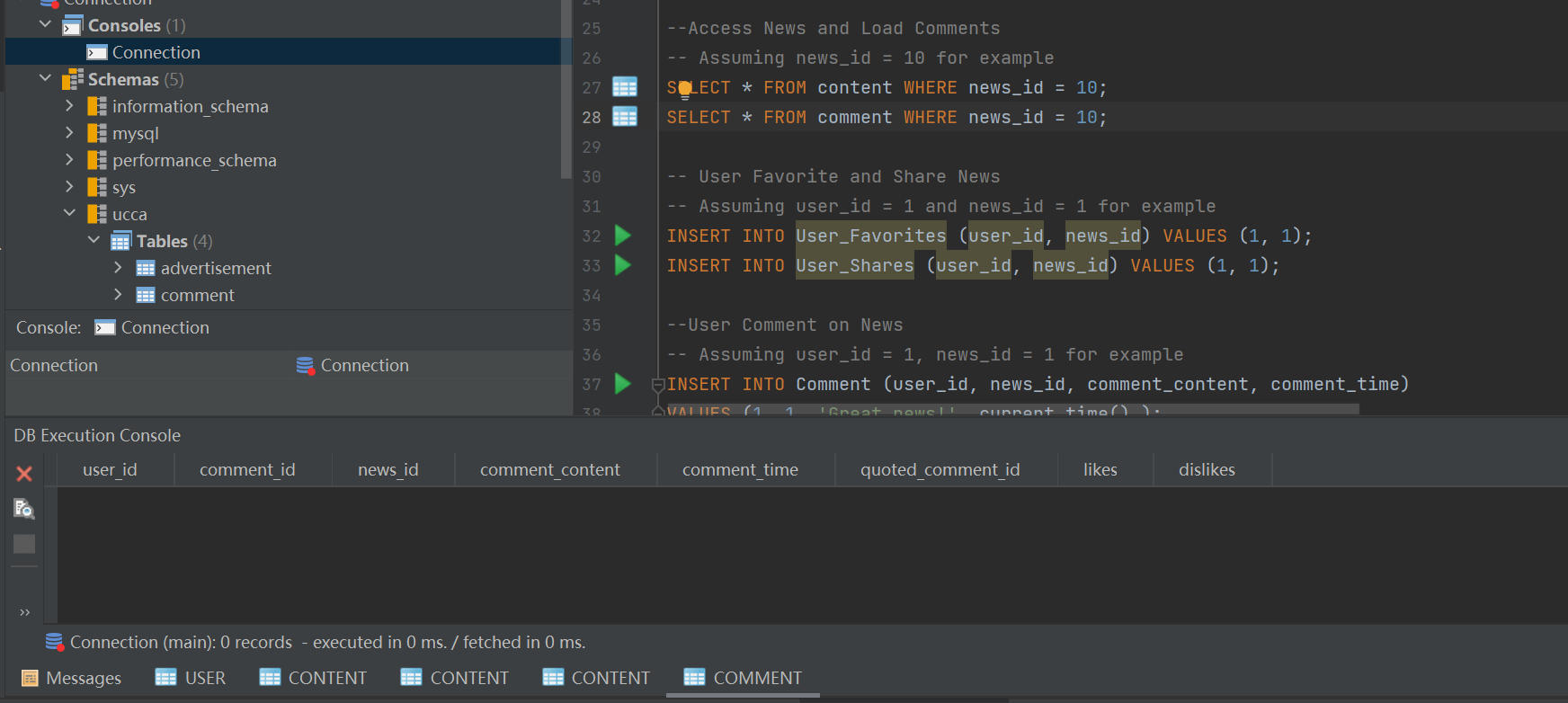


--Access News and Load Comments

-- Assuming news\_id = 10 for example

SELECT \* FROM Content WHERE news\_id = 10;

SELECT \* FROM Comment WHERE news\_id = 10;



--User Comment on News

-- Assuming user\_id = 1, news\_id = 1 for example

INSERT INTO Comment (user\_id, news\_id, comment\_content, comment\_time)

VALUES (1, 1, 'Great news!', current\_time() );

--User Like/Dislike Comment

-- Assuming comment\_id = 1 for example

UPDATE Comment SET likes = likes + 1 WHERE comment\_id = 1;

-- or

UPDATE Comment SET dislikes = dislikes + 1 WHERE comment\_id = 1;

--User Delete Own Comment

-- Assuming user\_id = 1 and comment\_id = 1 for example

DELETE FROM Comment WHERE user\_id = 1 AND comment\_id = 1;

-- View User's Comment History

-- Assuming user\_id = 1 for example

SELECT \* FROM Comment WHERE user\_id = 1;

-- View User's Browsing History

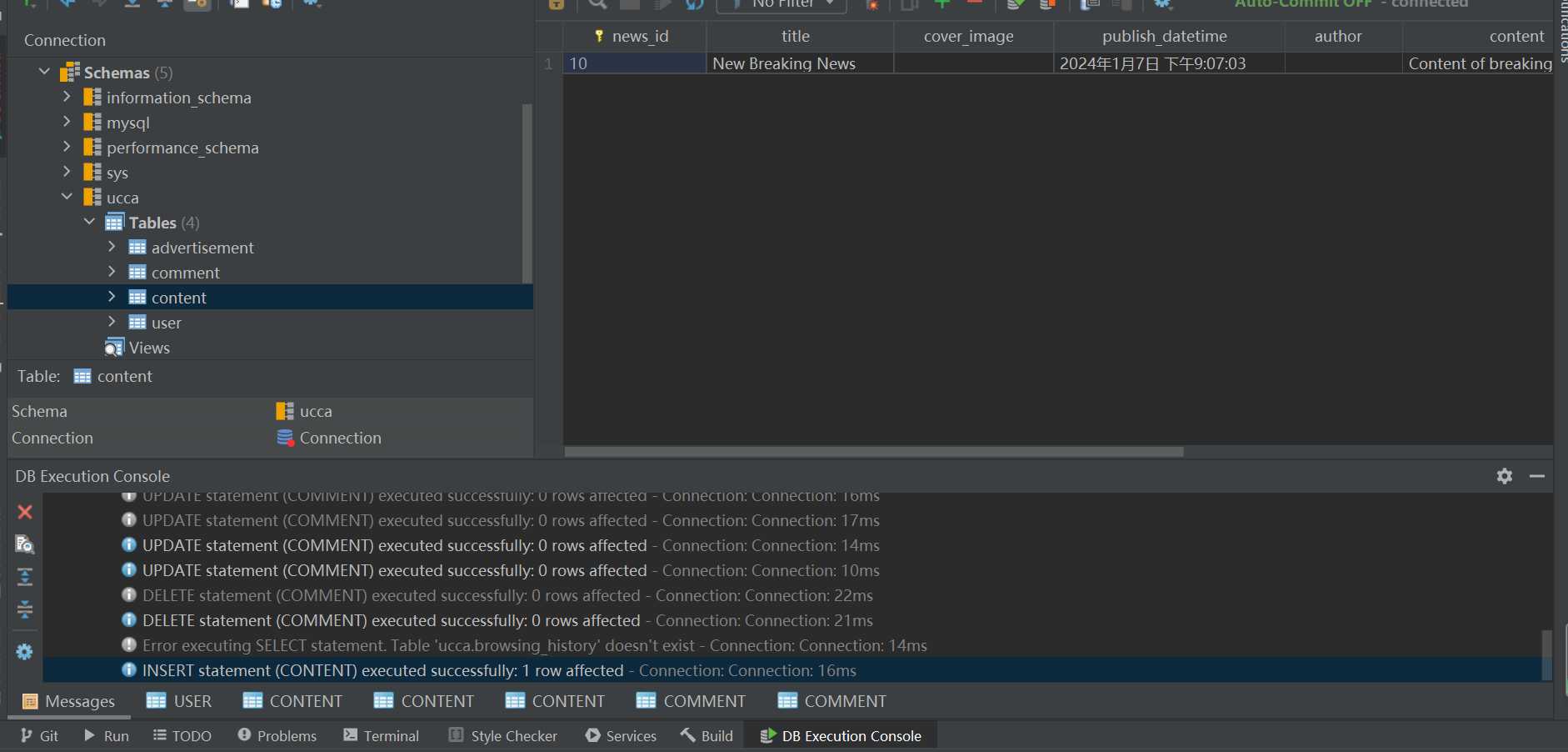
-- Assuming user\_id = 1 for example

SELECT \* FROM Browsing\_History WHERE user\_id = 1;

-- (Simulated) Publish News

INSERT INTO Content (news\_id, title, content, publish\_datetime)

VALUES (10, 'New Breaking News', 'Content of breaking news...', current\_time() );



-- Get Ads by Content Type

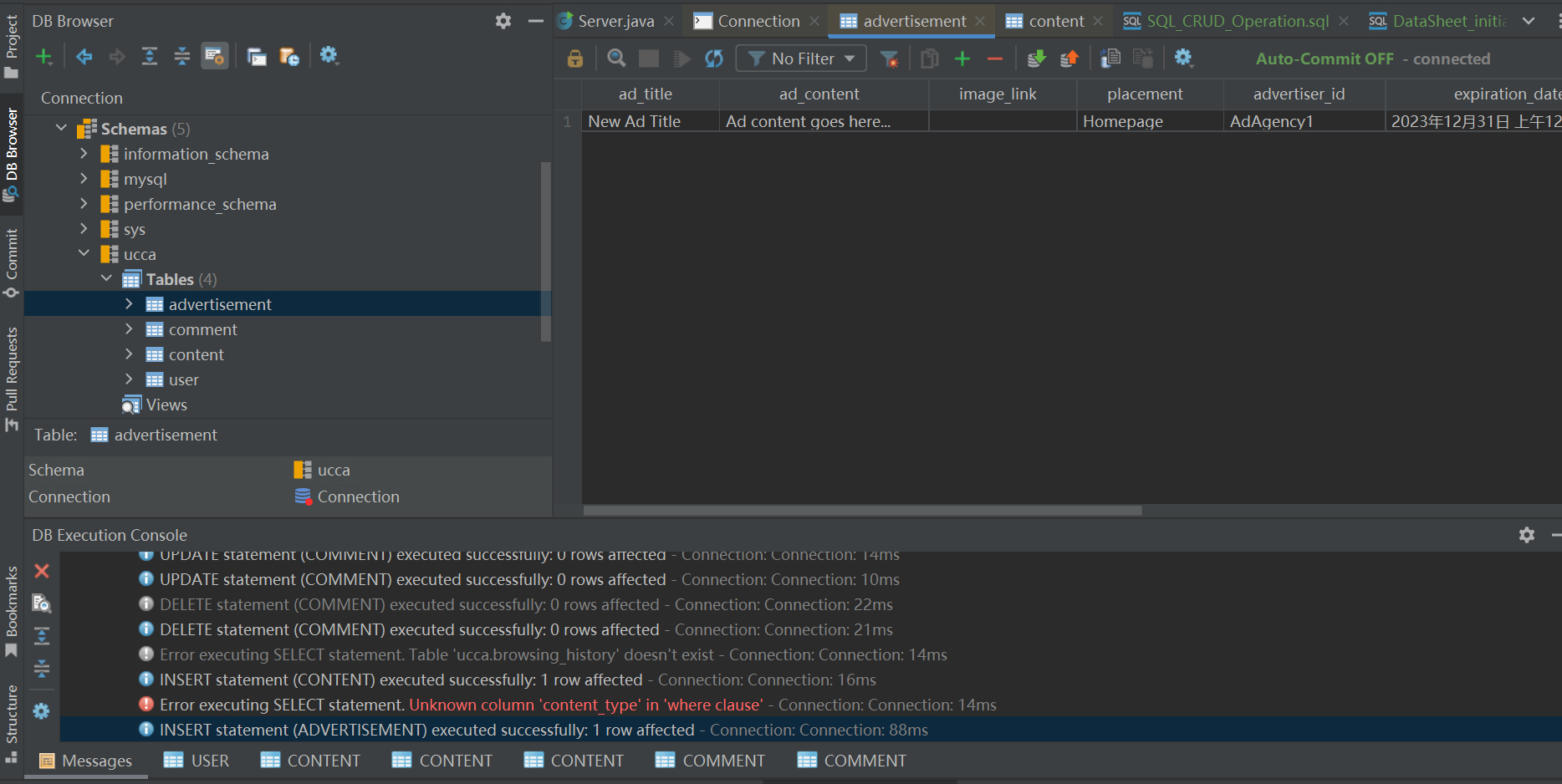
-- Assuming content\_type = 'Politics' for example

SELECT \* FROM Advertisement WHERE content\_type = 'Politics';

-- Publish Advertisement

INSERT INTO Advertisement (ad\_title, ad\_content, placement, advertiser\_id, expiration\_date, region\_limit, device\_limit, weight)

VALUES ('New Ad Title', 'Ad content goes here...', 'Homepage', 'AdAgency1', '2023-12-31', 'US', 'Desktop', 10);



Task 2: JDBC Implementation in Java

2.1. Successfully Execute!

对于执行部分，因为数据库为空，暂时不予以展示(相关部分代码已注释)

