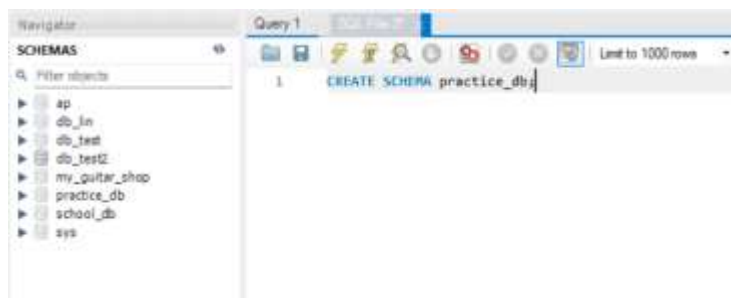


Part1: user table parctice

- Create a new database called Practice_DB.



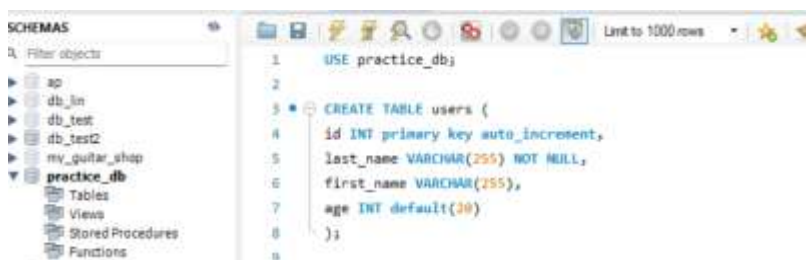
- Switch to the Practice_DB database and Create a table named users with the following columns:

id: INT, Primary Key, Auto Increment

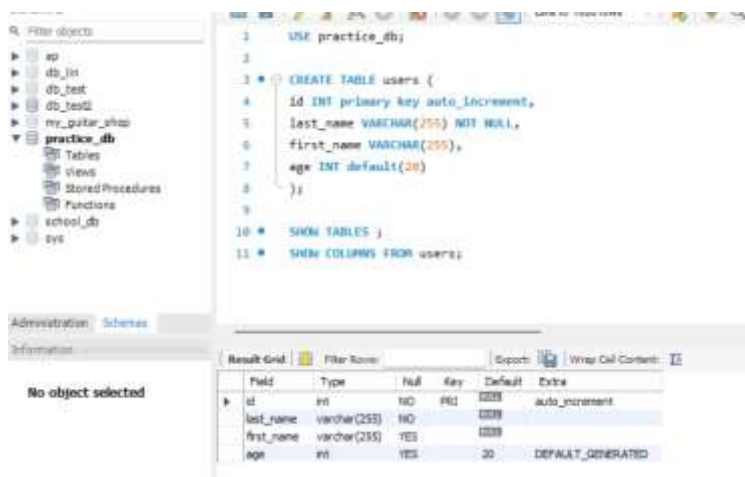
lastname: VARCHAR(255), Not Null

firstname: VARCHAR(255)

age: INT, Default = 20



- Show all tables in the database.
- Describe the structure of the users table.



- Add a new column called email of type VARCHAR(255).

The screenshot shows the SQL Studio interface. On the left, the 'SCHEMAS' pane shows the 'practice_db' schema selected. The main editor displays the following SQL script:

```

1 use practice_db;
2
3 CREATE TABLE users (
4   id INT primary key auto_increment,
5   last_name VARCHAR(255) NOT NULL,
6   first_name VARCHAR(255),
7   age INT default(20)
8 );
9
10 ALTER TABLE users
11 ADD email VARCHAR(255);
12
13 SHOW TABLES ;
14 SHOW COLUMNS FROM users;

```

Below the editor, the 'Result Grid' shows the table structure:

Field	Type	Null	Key	Default	Extra
id	int	NO	PR	auto_increment	
last_name	varchar(255)	NO			
first_name	varchar(255)	YES			
age	int	YES		20	DEFAULT_GENERATED
email	varchar(255)	YES			

- Modify the email column to be NOT NULL.

The screenshot shows the SQL Studio interface. The main editor displays the following SQL script:

```

9
10 -- add col
11 ALTER TABLE users
12 ADD email VARCHAR(255);
13
14 -- modify email
15 ALTER TABLE users
16 MODIFY email VARCHAR(255) NOT NULL;
17
18 -- show tab
19 SHOW TABLES ;
20 -- describe
21 SHOW COLUMNS FROM users;

```

The 'Result Grid' shows the updated table structure:

Field	Type	Null	Key	Default	Extra
id	int	NO	PR	auto_increment	
last_name	varchar(255)	NO			
first_name	varchar(255)	YES			
age	int	YES		20	DEFAULT_GENERATED
email	varchar(255)	NO			

- Rename the column email to user_email.

The screenshot shows the SQL Studio interface. The main editor displays the following SQL script:

```

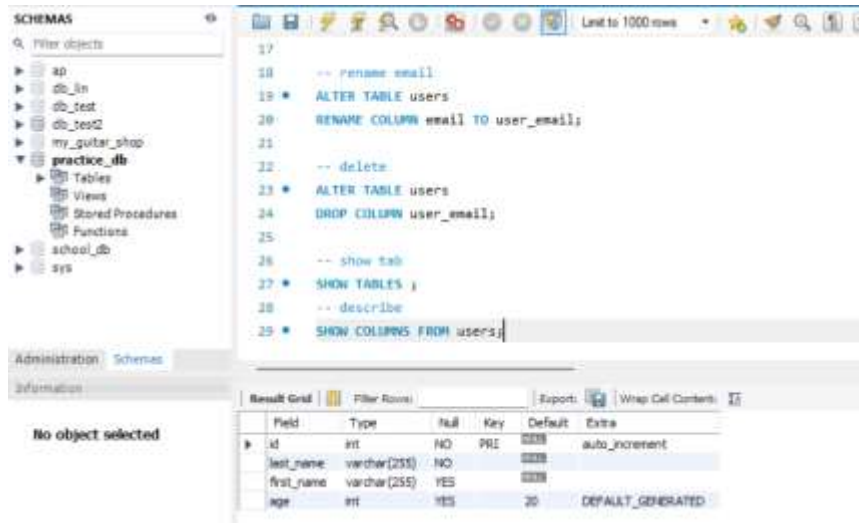
13
14 -- modify email
15 ALTER TABLE users
16 MODIFY email VARCHAR(255) NOT NULL;
17
18 -- rename email
19 ALTER TABLE users
20 RENAME COLUMN email TO user_email;
21
22 -- show tab
23 SHOW TABLES ;
24 -- describe
25 SHOW COLUMNS FROM users;

```

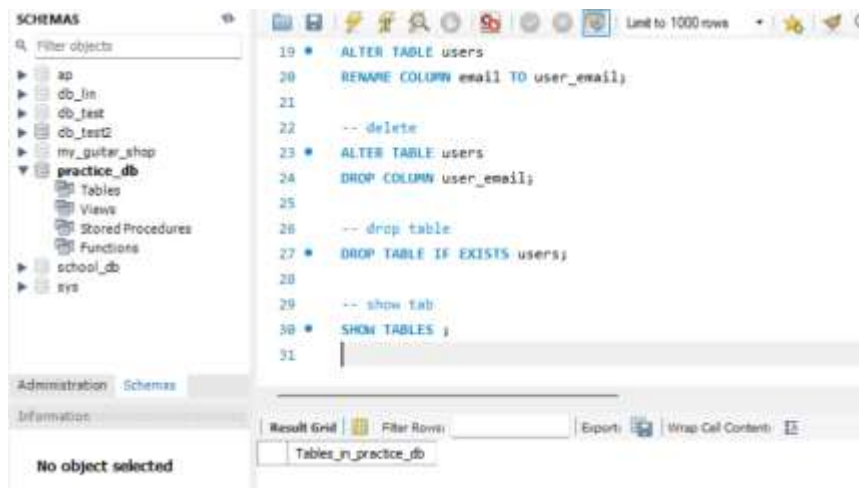
The 'Result Grid' shows the final table structure:

Field	Type	Null	Key	Default	Extra
id	int	NO	PR	auto_increment	
last_name	varchar(255)	NO			
first_name	varchar(255)	YES			
age	int	YES		20	DEFAULT_GENERATED
user_email	varchar(255)	NO			

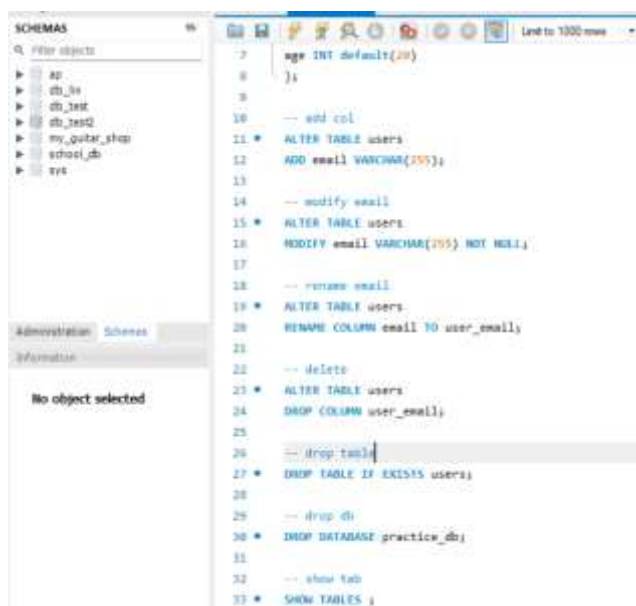
- Delete the column user_email.



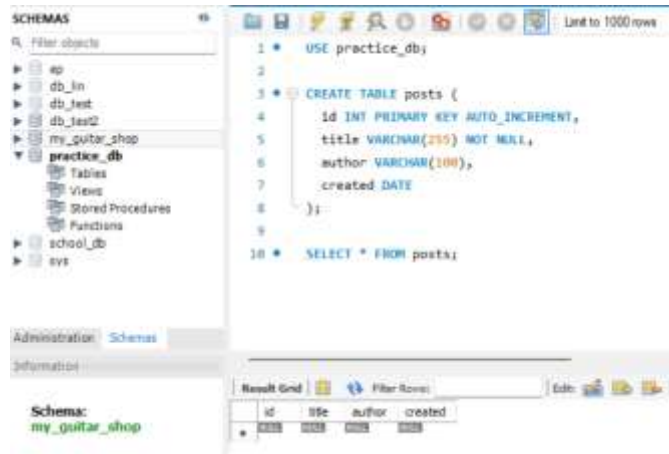
- Drop the users table.



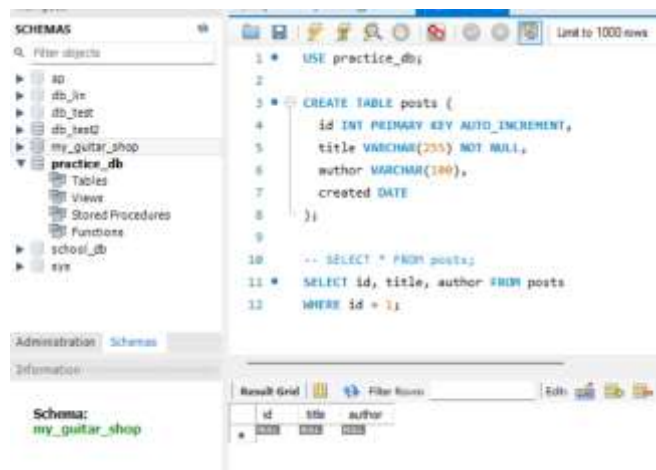
- Drop the Practice_DB database.



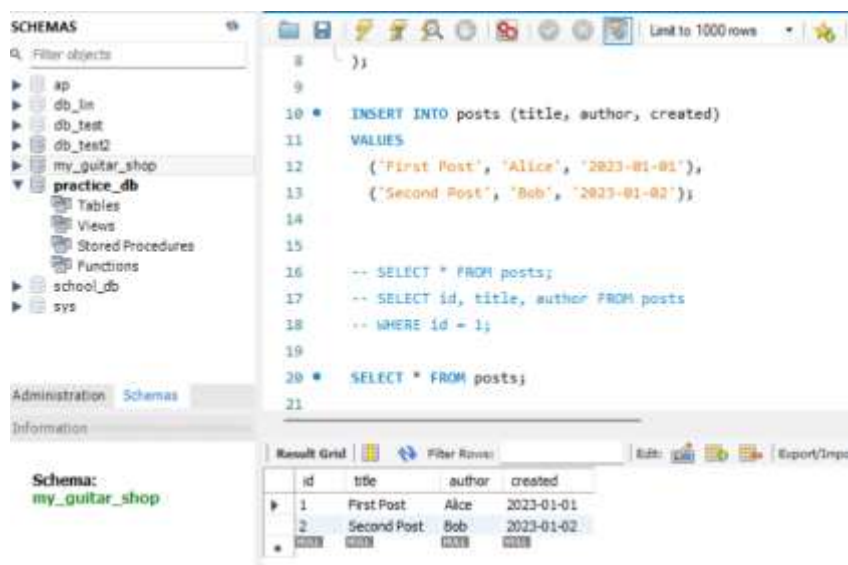
Part 2: Bonus – Posts Table Practice and Show all data from the posts table.



- Display only id, title, and author where id = 1.



- Insert two new posts into the posts table:
Post 1: Title = 'First Post', Author = 'Alice', Created = '2023-01-01'
Post 2: Title = 'Second Post', Author = 'Bob', Created = '2023-01-02'



- Update the post with id = 1:
- Change title to 'Updated Post' and created date to '2023-01-05'.

The screenshot shows a database management tool interface. On the left, the 'SCHEMAS' panel lists various databases, with 'practice_db' selected. The main area displays SQL queries. The first query inserts two posts. The second query updates the post with id = 1. The third query selects all posts. The result grid at the bottom shows the following data:

id	title	author	created
1	Updated post	Alice	2023-01-05
2	Second Post	Bob	2023-01-02

- Delete all posts written by 'Bob'.

The screenshot shows the same database management tool interface. The SQL queries now include a delete statement for posts written by 'Bob'. The result grid at the bottom shows the following data:

id	title	author	created
1	Updated post	Alice	2023-01-05