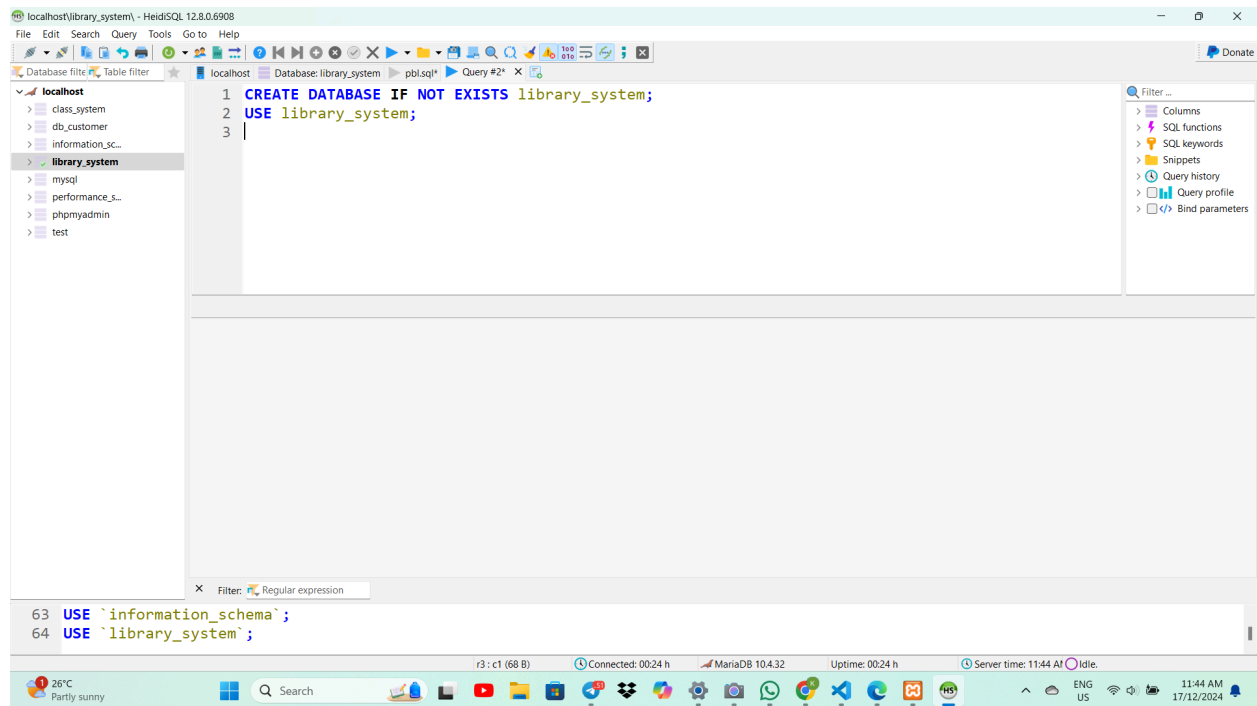SQL-TASK
KHAIRA QAUTHAR BINTI KAMARULZAMAN
1K5
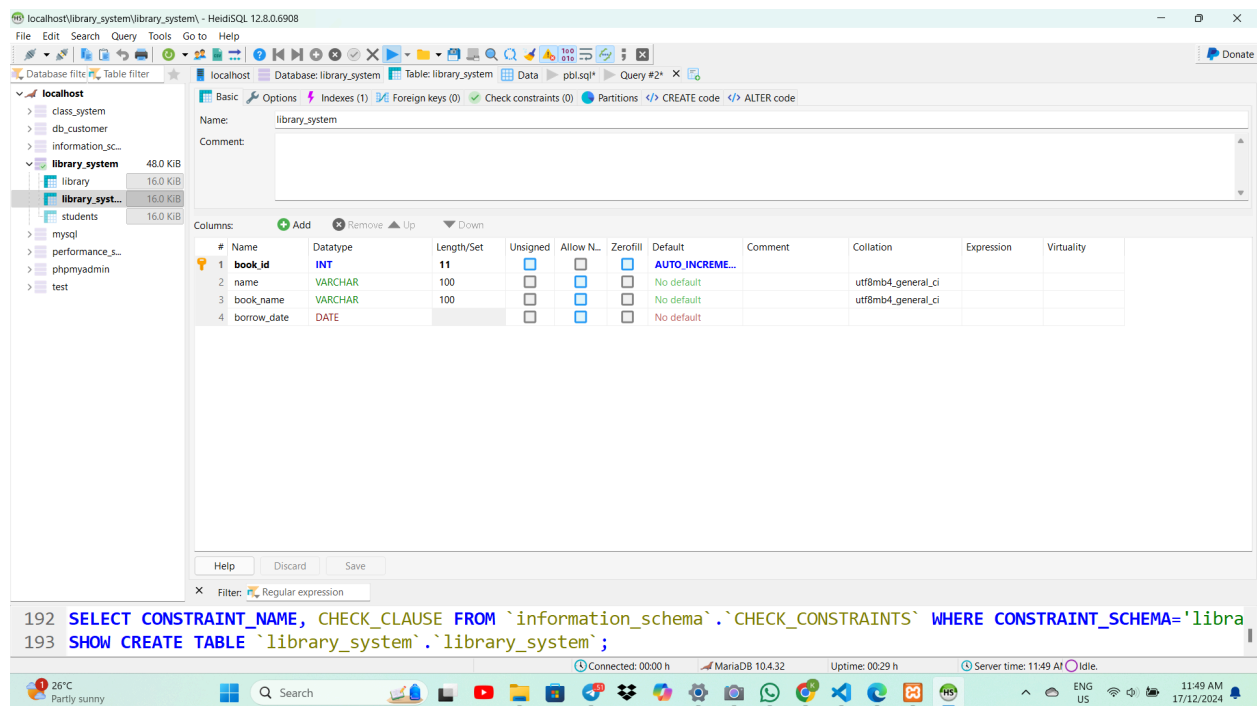
- - Create database

CREATE DATABASE IF NOT EXISTS library_system;
USE library_system;
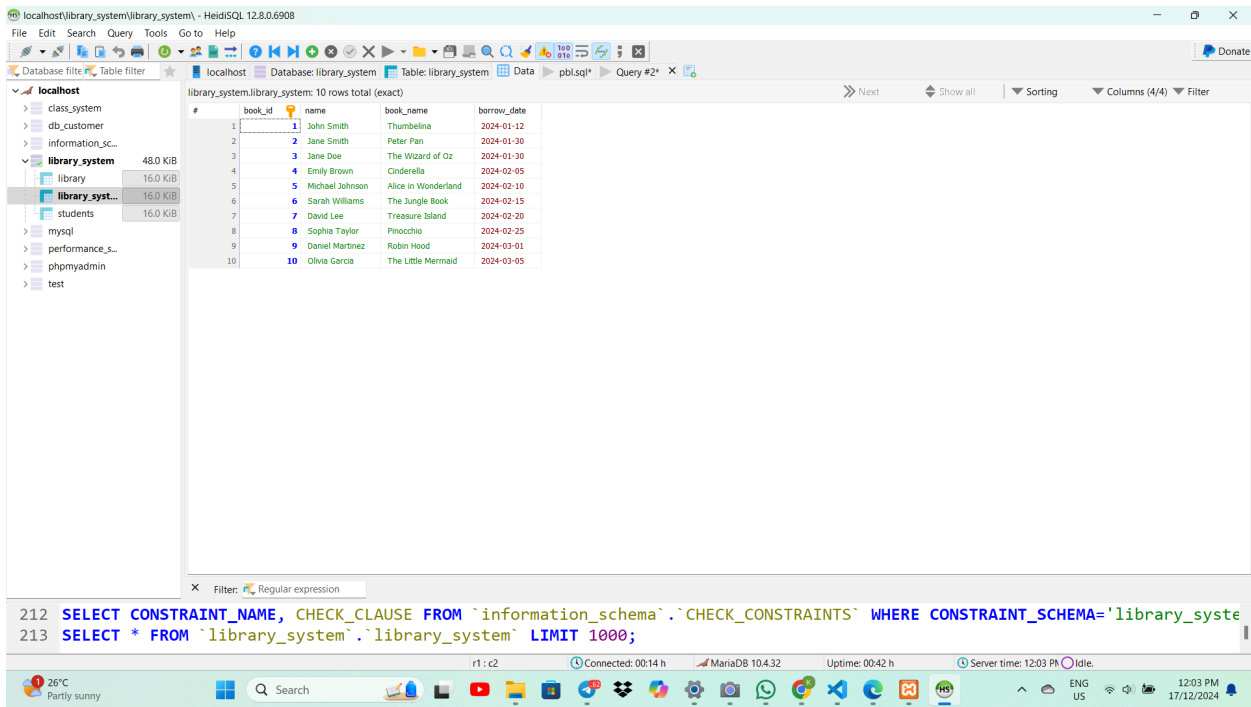
- - Create library system table

CREATE TABLE library_system (
      book_id INT PRIMARY KEY AUTO_INCREMENT,
      name VARCHAR(100) NOT NULL,
      book_name VARCHAR(100) NOT NULL,
      borrow_date DATE NOT NULL
      );

- - Add information

INSERT INTO library_system (book_id, name, book_name, borrow_date)
VALUES
('1', 'John Smith', 'Thumbelina', '2024-01-12'),
('2', 'Jane Smith', 'Peter Pan', '2024-01-30'),
('3', 'Jane Doe', 'The Wizard of Oz', '2024-01-30'),
('4', 'Emily Brown', 'Cinderella', '2024-02-05'),
('5', 'Michael Johnson', 'Alice in Wonderland', '2024-02-10'),

('6', 'Sarah Williams', 'The Jungle Book', '2024-02-15'),
('7', 'David Lee', 'Treasure Island', '2024-02-20'),
('8', 'Sophia Taylor', 'Pinocchio', '2024-02-25'),
('9', 'Daniel Martinez', 'Robin Hood', '2024-03-01'),
('10', 'Olivia Garcia', 'The Little Mermaid', '2024-03-05');

- - Update borrow date

UPDATE library_system
SET borrow_date = '2024-03-20'
WHERE book_id = 1;

Before

library_system.library_system: 10 rows total (exact)

#	book_id 🔑	name	book_name	borrow_date
1	1	John Smith	Thumbelina	2024-03-20

After

- - Find books borrowed after a date

SELECT * FROM library_system
WHERE borrow_date > '2024-02-01';

library_system (8r × 4c)

#	book_id 🔑	name	book_name	borrow_date
1	1	John Smith	Thumbelina	2024-03-20
2	4	Emily Brown	Cinderella	2024-02-05
3	5	Michael Johnson	Alice in Wonderland	2024-02-10
4	6	Sarah Williams	The Jungle Book	2024-02-15
5	7	David Lee	Treasure Island	2024-02-20
6	8	Sophia Taylor	Pinocchio	2024-02-25
7	9	Daniel Martinez	Robin Hood	2024-03-01
8	10	Olivia Garcia	The Little Mermaid	2024-03-05

- - Find books by name with date

SELECT name, borrow_date
FROM library_system
WHERE book_name = 'Alice in Wonderland';

library_system (1r × 2c)

#	name	borrow_date
1	Michael Johnson	2024-02-10

- - Delete book

DELETE FROM library_system
WHERE book_id = '1';

library_system.library_system: 9 rows total (exact)

#	book_id 🔑	name	book_name	borrow_date
1	2	Jane Smith	Peter Pan	2024-01-30
2	3	Jane Doe	The Wizard of Oz	2024-01-30
3	4	Emily Brown	Cinderella	2024-02-05
4	5	Michael Johnson	Alice in Wonderland	2024-02-10
5	6	Sarah Williams	The Jungle Book	2024-02-15
6	7	David Lee	Treasure Island	2024-02-20
7	8	Sophia Taylor	Pinocchio	2024-02-25
8	9	Daniel Martinez	Robin Hood	2024-03-01
9	10	Olivia Garcia	The Little Mermaid	2024-03-05

- - Add book

INSERT INTO library_system (book_id, name, book_name, borrow_date)
VALUES ('1', 'Emma Wilson', 'Snow White', '2024-03-15');

library_system.library_system: 11 rows total (exact)

#	book_id 🔑	name	book_name	borrow_date
1	1	Emma Wilson	Snow White	2024-03-15
2	2	Jane Smith	Peter Pan	2024-01-30
3	3	Jane Doe	The Wizard of Oz	2024-01-30
4	4	Emily Brown	Cinderella	2024-02-05
5	5	Michael Johnson	Alice in Wonderland	2024-02-10
6	6	Sarah Williams	The Jungle Book	2024-02-15
7	7	David Lee	Treasure Island	2024-02-20
8	8	Sophia Taylor	Pinocchio	2024-02-25
9	9	Daniel Martinez	Robin Hood	2024-03-01
10	10	Olivia Garcia	The Little Mermaid	2024-03-05