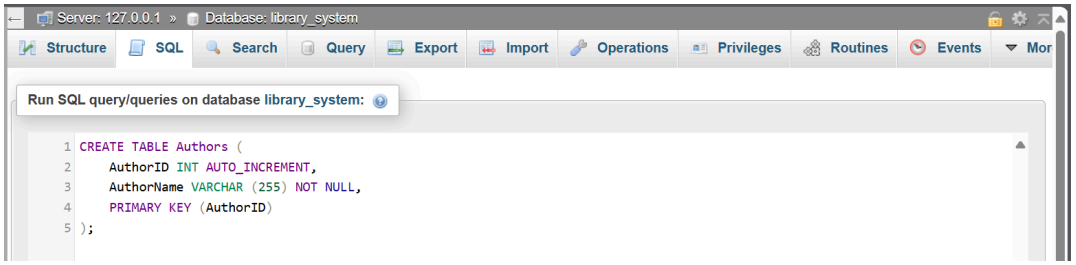
SCS2209 Database II
Labsheet 01

Name : K D I Okadini
Index No : 22001433

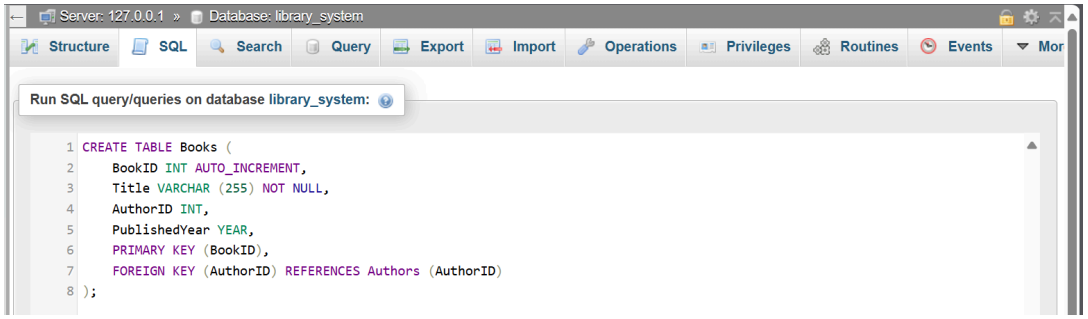
Question 01

1.

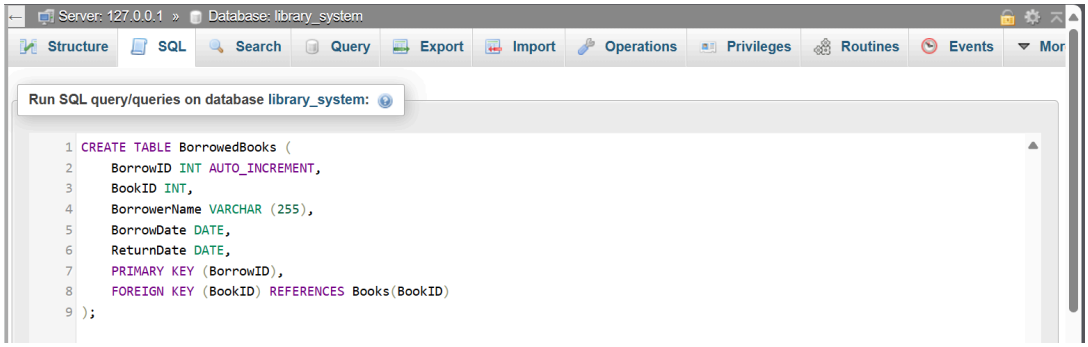
a. Authors table



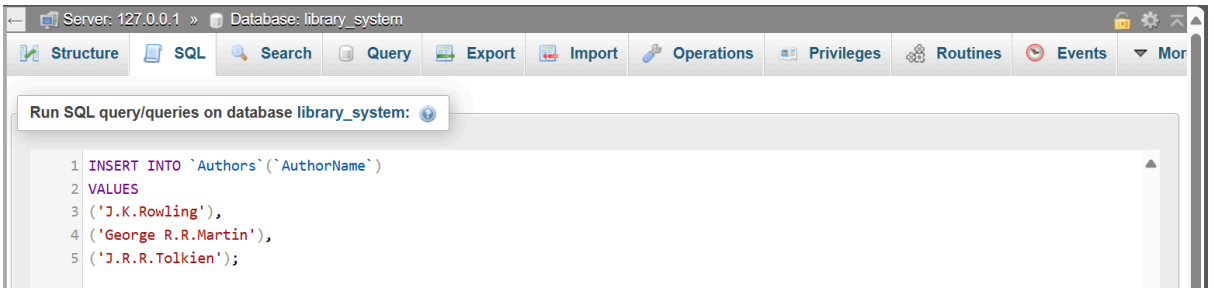
b. Books table



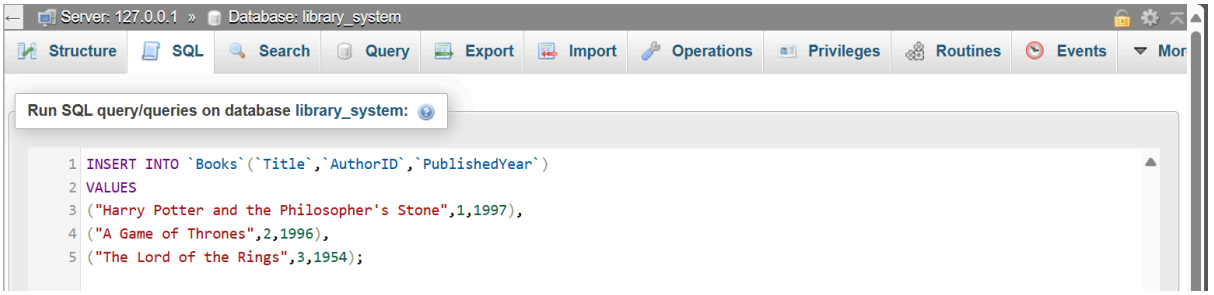
c. BorrowedBooks table



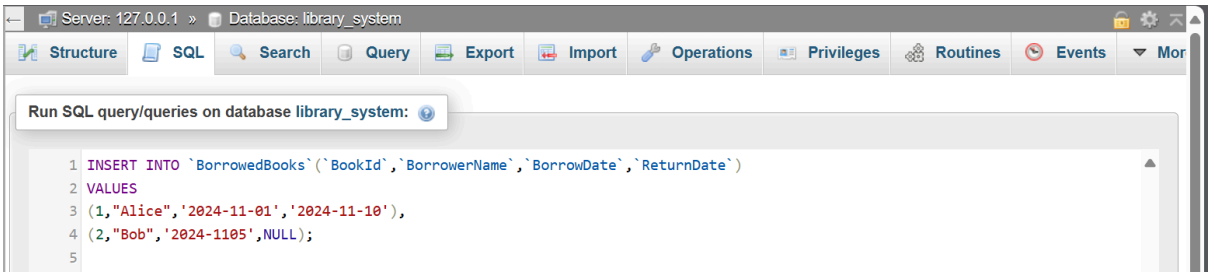
2.


Server: 127.0.0.1 » Database: library_system
Structure SQL Search Query Export Import Operations Privileges Routines Events Mor
Run SQL query/queries on database library_system:
INSERT INTO `Authors`(`AuthorName`)
VALUES
('J.K.Rowling'),
('George R.R.Martin'),
('J.R.R.Tolkien');

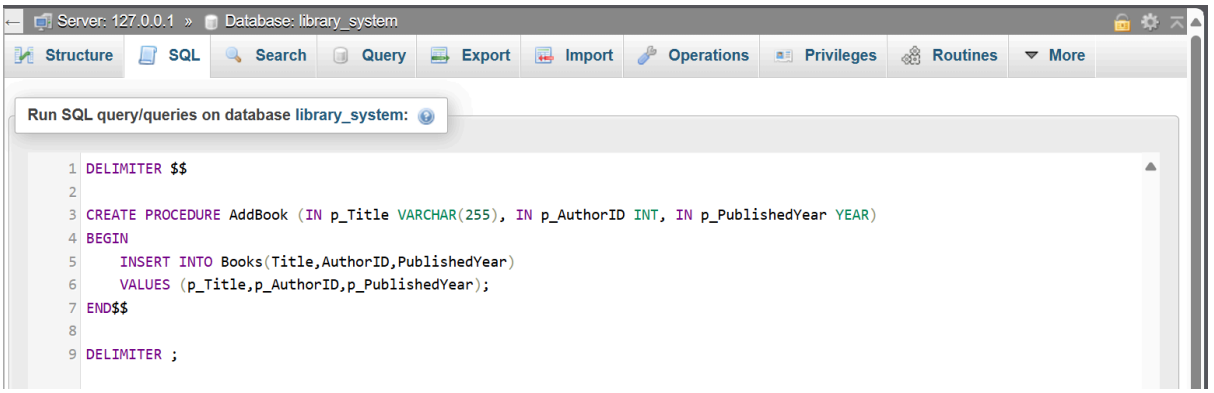
3.

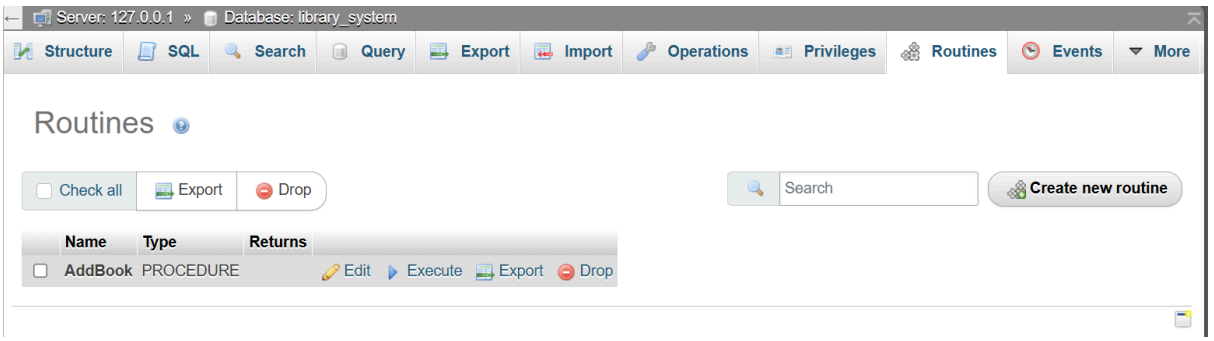

Server: 127.0.0.1 » Database: library_system
Structure SQL Search Query Export Import Operations Privileges Routines Events Mor
Run SQL query/queries on database library_system:
INSERT INTO `Books`(`Title`,`AuthorID`,`PublishedYear`)
VALUES
("Harry Potter and the Philosopher's Stone",1,1997),
("A Game of Thrones",2,1996),
("The Lord of the Rings",3,1954);

4.

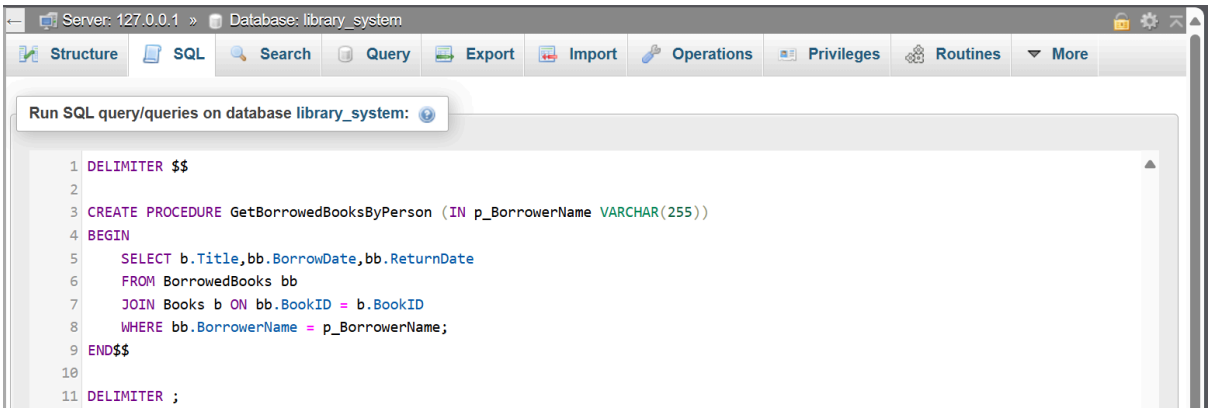

Server: 127.0.0.1 » Database: library_system
Structure SQL Search Query Export Import Operations Privileges Routines Events Mor
Run SQL query/queries on database library_system:
INSERT INTO `BorrowedBooks`(`BookId`,`BorrowerName`,`BorrowDate`,`ReturnDate`)
VALUES
(1,"Alice",'2024-11-01','2024-11-10'),
(2,"Bob",'2024-1105',NULL);

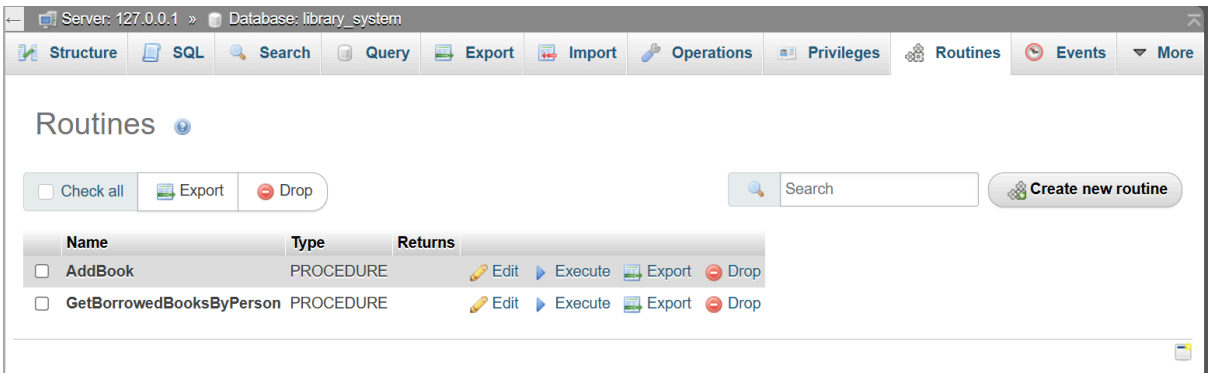
5.


Server: 127.0.0.1 » Database: library_system
Structure SQL Search Query Export Import Operations Privileges Routines More
Run SQL query/queries on database library_system:
DELIMITER $$
CREATE PROCEDURE AddBook (IN p_Title VARCHAR(255), IN p_AuthorID INT, IN p_PublishedYear YEAR)
BEGIN
INSERT INTO Books(Title,AuthorID,PublishedYear)
VALUES (p_Title,p_AuthorID,p_PublishedYear);
END$$
DELIMITER ;

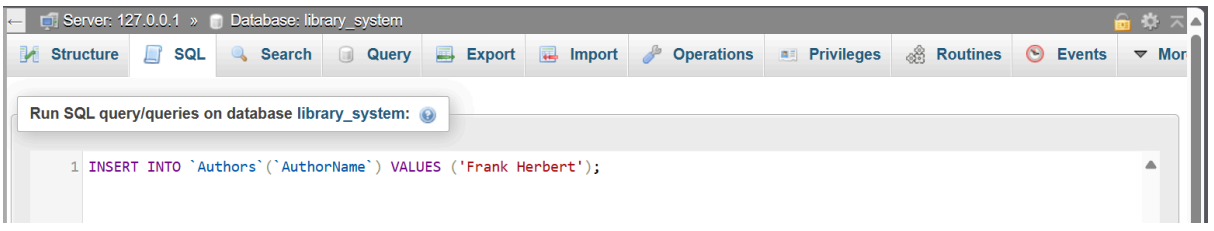

Server: 127.0.0.1 » Database: library_system
Structure SQL Search Query Export Import Operations Privileges Routines Events More
Routines
Check all Export Drop
Search
Create new routine
Name Type Returns
AddBook PROCEDURE Edit Execute Export Drop

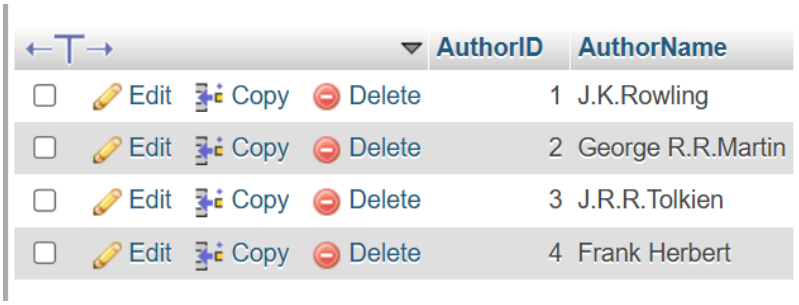
6.

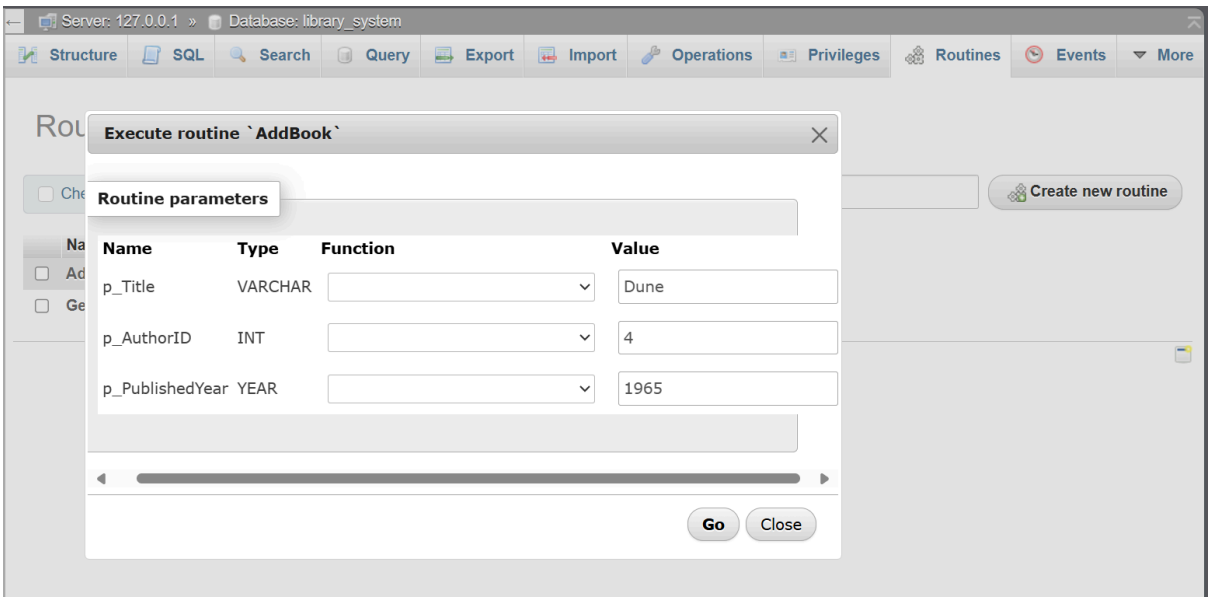

Server: 127.0.0.1 » Database: library_system
Structure SQL Search Query Export Import Operations Privileges Routines More
Run SQL query/queries on database library_system:
DELIMITER $$
CREATE PROCEDURE GetBorrowedBooksByPerson (IN p_BorrowerName VARCHAR(255))
BEGIN
SELECT b.Title,bb.BorrowDate,bb.ReturnDate
FROM BorrowedBooks bb
JOIN Books b ON bb.BookID = b.BookID
WHERE bb.BorrowerName = p_BorrowerName;
END$$
DELIMITER ;


Server: 127.0.0.1 » Database: library_system
Structure SQL Search Query Export Import Operations Privileges Routines Events More
Routines
Check all Export Drop
Search
Create new routine
Name Type Returns
AddBook PROCEDURE Edit Execute Export Drop
GetBorrowedBooksByPerson PROCEDURE Edit Execute Export Drop

7.

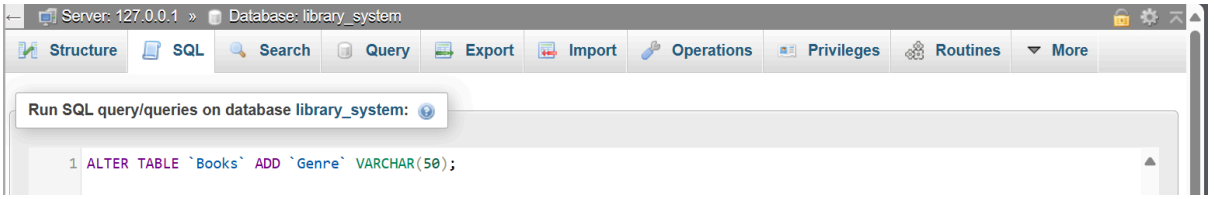

Server: 127.0.0.1 » Database: library_system
Structure SQL Search Query Export Import Operations Privileges Routines Events Mor
Run SQL query/queries on database library_system:
INSERT INTO `Authors`(`AuthorName`) VALUES ('Frank Herbert');

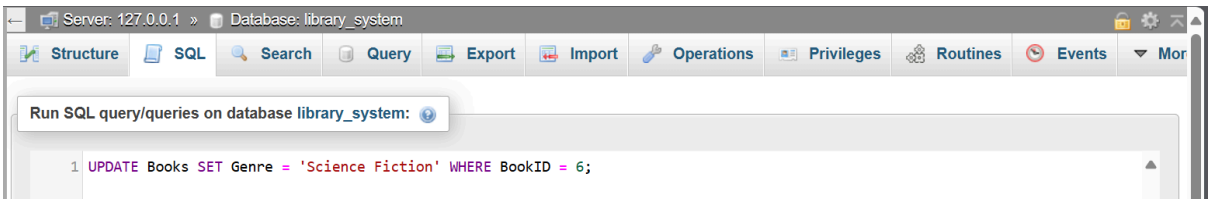

AuthorID AuthorName
Edit Copy Delete 1 J.K.Rowling
Edit Copy Delete 2 George R.R.Martin
Edit Copy Delete 3 J.R.R.Tolkien
Edit Copy Delete 4 Frank Herbert

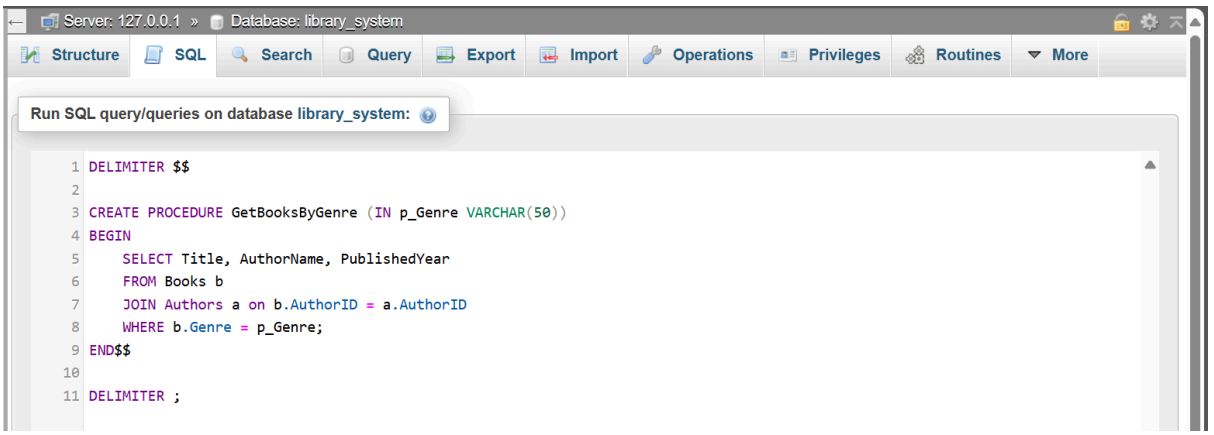


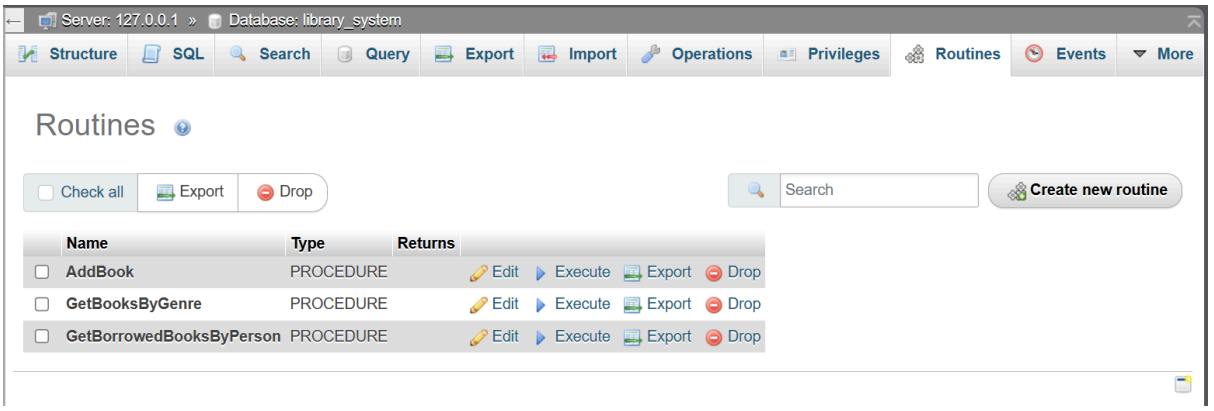
	BookID	Title	AuthorID	PublishedYear
Edit Copy Delete	1	Harry Potter and the Philosopher's Stone	1	1997
Edit Copy Delete	2	A Game of Thrones	2	1996
Edit Copy Delete	3	The Lord of the Rings	3	1954
Edit Copy Delete	6	Dune	4	1965

8.





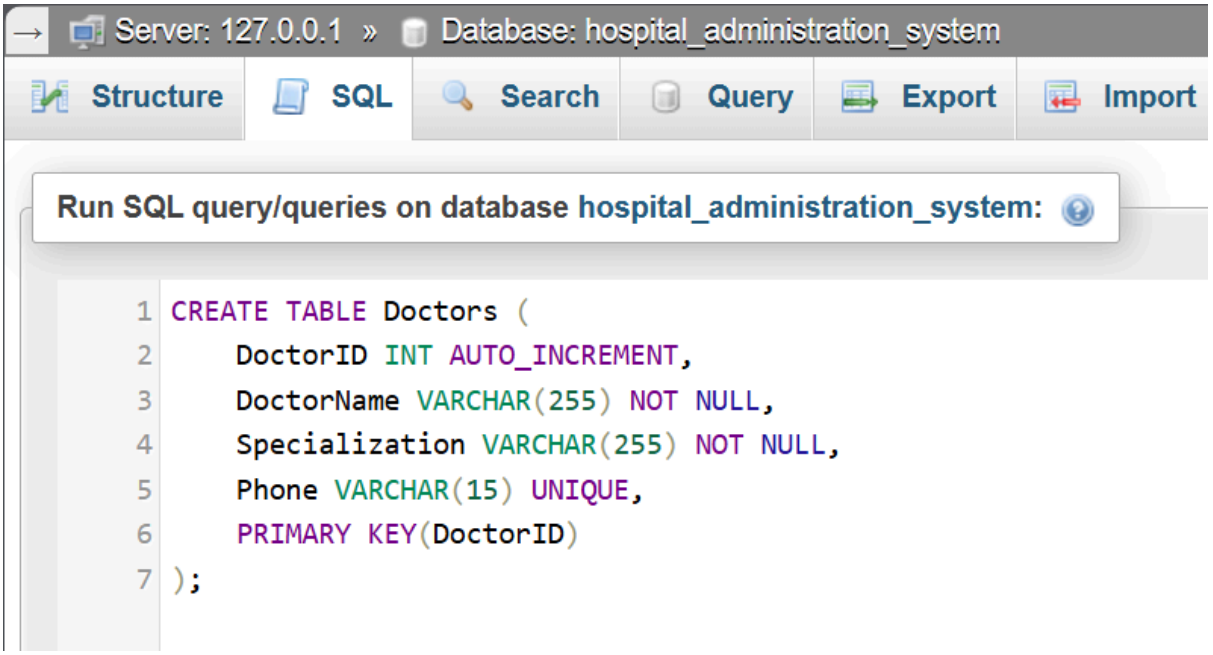

Server: 127.0.0.1 » Database: library_system
Structure SQL Search Query Export Import Operations Privileges Routines More
Run SQL query/queries on database library_system:
DELIMITER $$
CREATE PROCEDURE GetBooksByGenre (IN p_Genre VARCHAR(50))
BEGIN
SELECT Title, AuthorName, PublishedYear
FROM Books b
JOIN Authors a on b.AuthorID = a.AuthorID
WHERE b.Genre = p_Genre;
END$$
DELIMITER ;


Server: 127.0.0.1 » Database: library_system
Structure SQL Search Query Export Import Operations Privileges Routines Events More
Routines
Check all Export Drop
Search
Create new routine
Name Type Returns
AddBook PROCEDURE Edit Execute Export Drop
GetBooksByGenre PROCEDURE Edit Execute Export Drop
GetBorrowedBooksByPerson PROCEDURE Edit Execute Export Drop

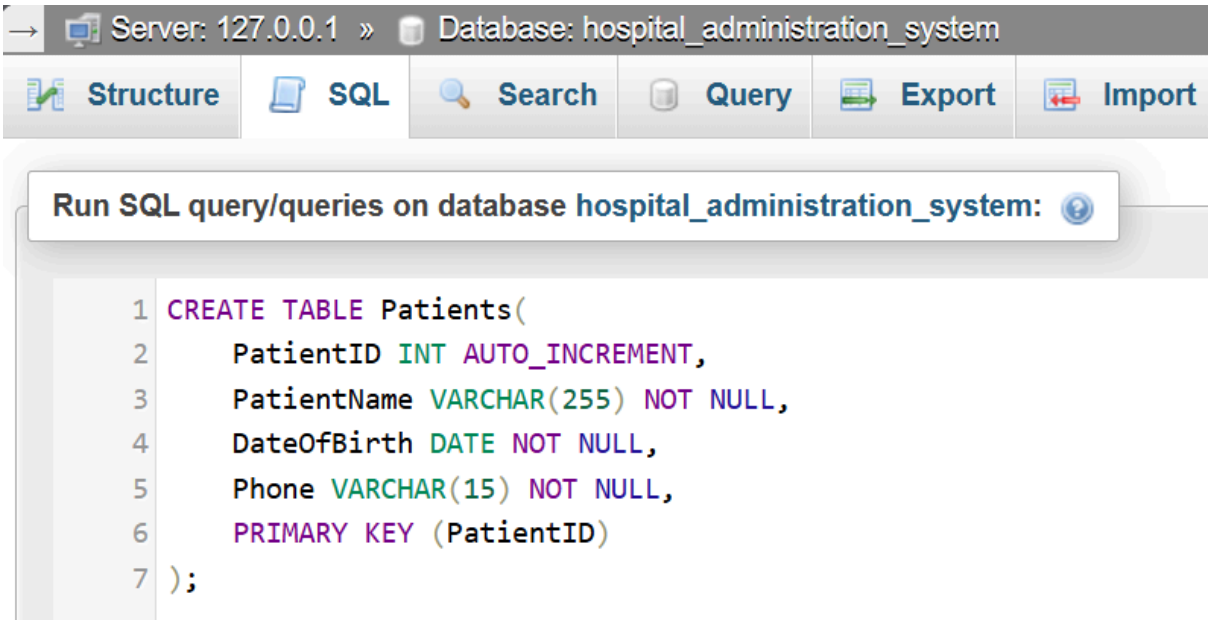
Question 02

1.

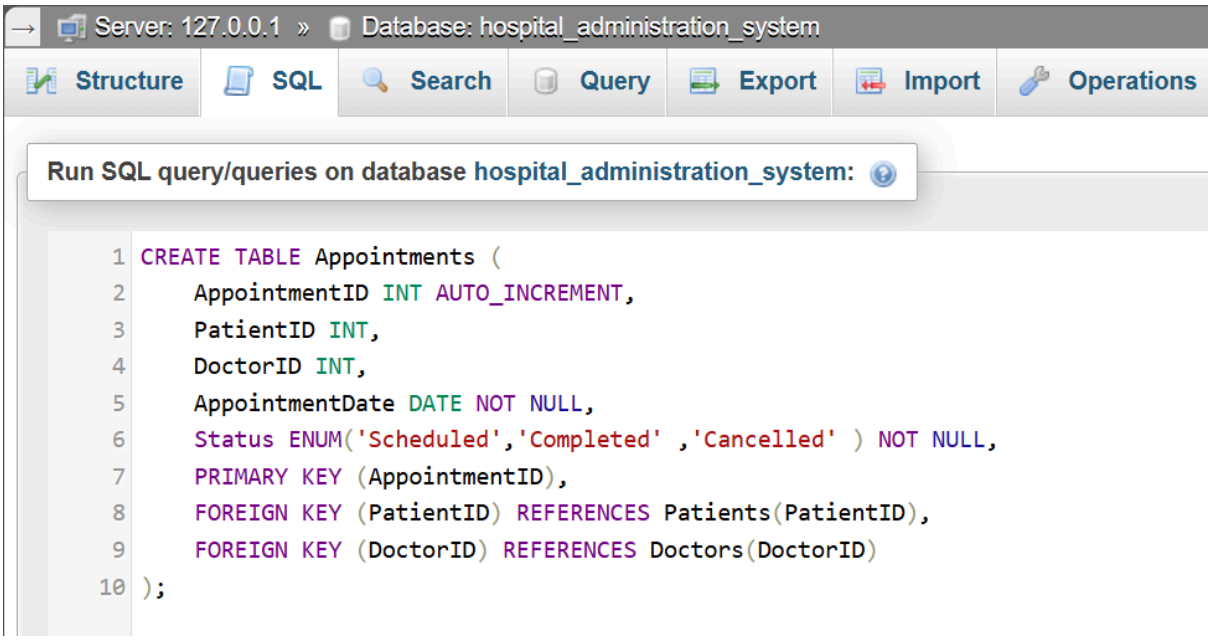
a. Doctors Table



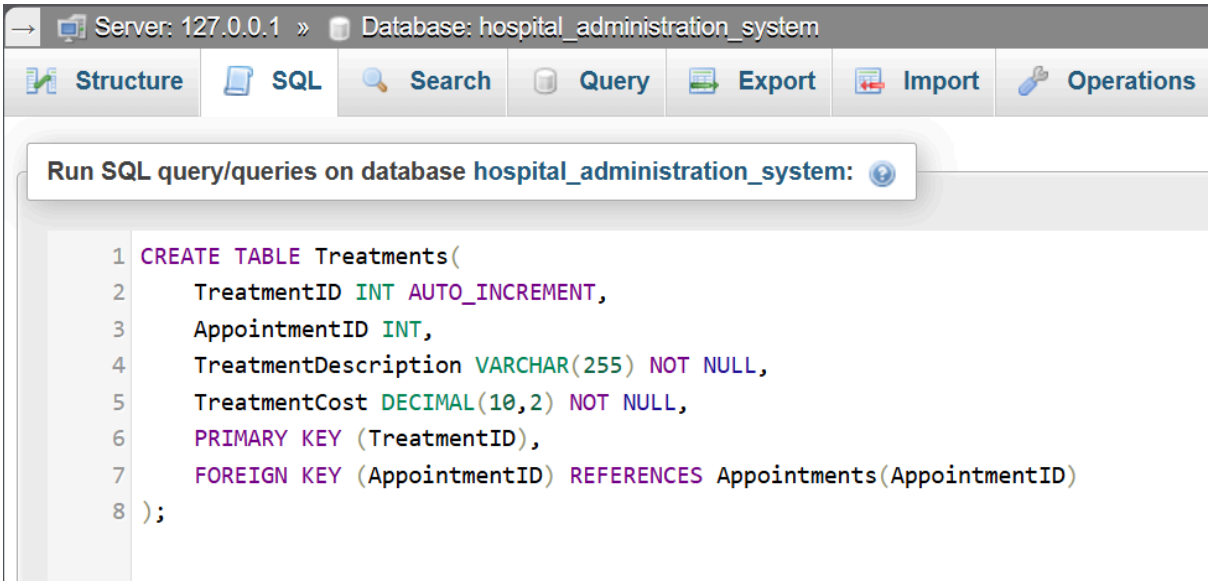
b. Patients Table



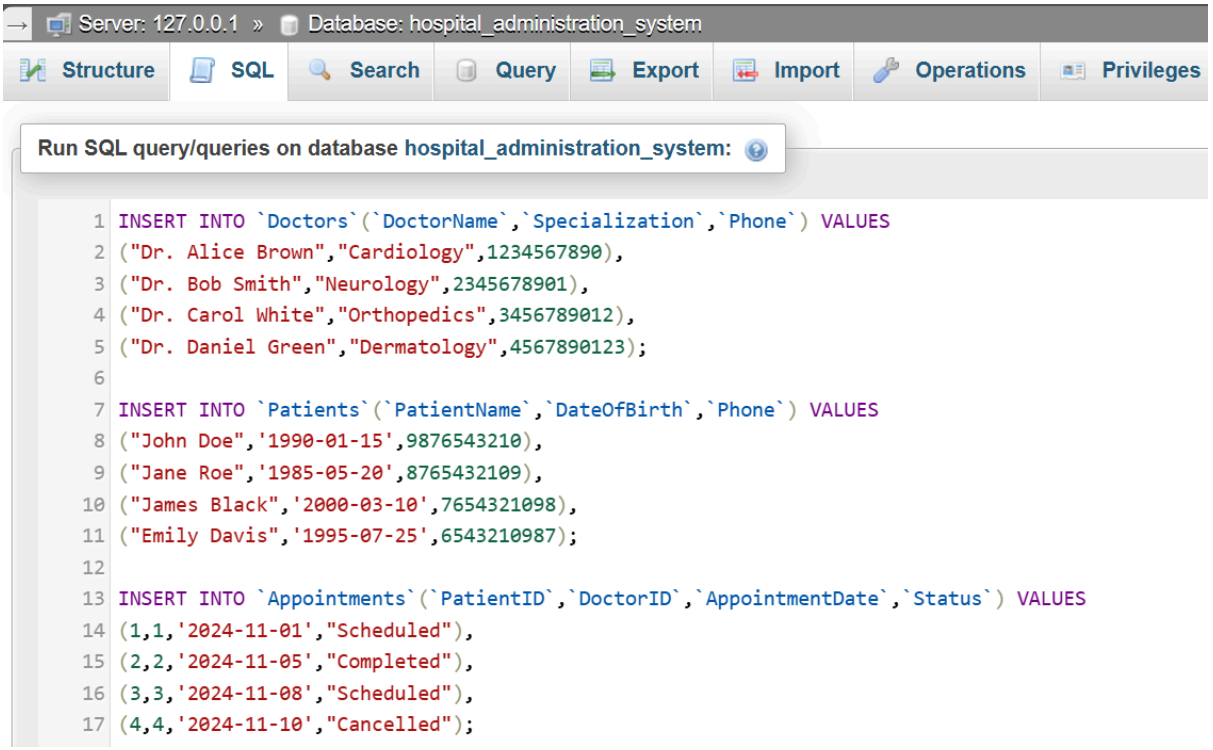
c. Appointments Table



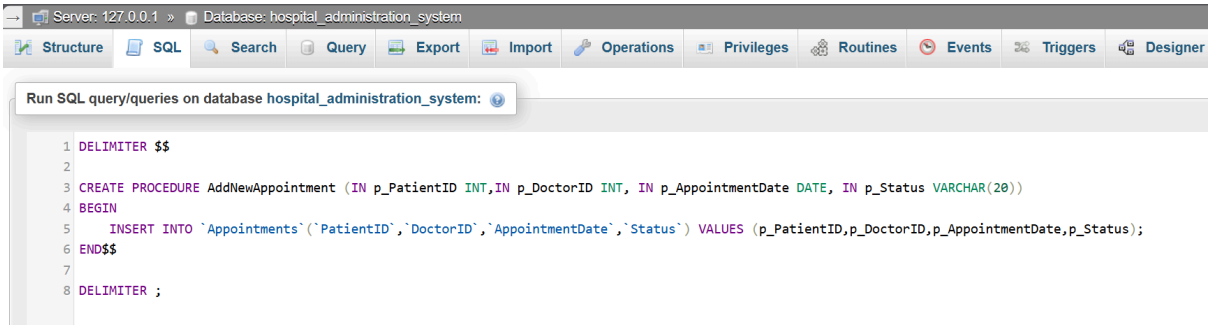
d. Treatments Table

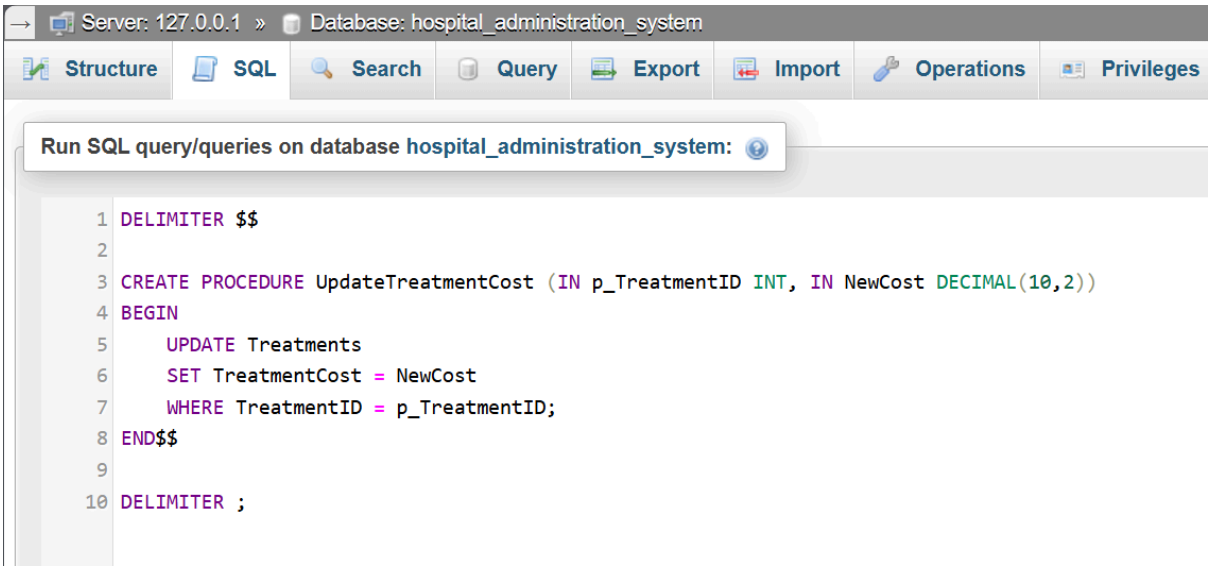


2.


Server: 127.0.0.1 » Database: hospital_administration_system
Structure SQL Search Query Export Import Operations Privileges
Run SQL query/queries on database hospital_administration_system:
INSERT INTO `Doctors`(`DoctorName`,`Specialization`,`Phone`) VALUES
("Dr. Alice Brown","Cardiology",1234567890),
("Dr. Bob Smith","Neurology",2345678901),
("Dr. Carol White","Orthopedics",3456789012),
("Dr. Daniel Green","Dermatology",4567890123);
INSERT INTO `Patients`(`PatientName`,`DateOfBirth`,`Phone`) VALUES
("John Doe",'1990-01-15',9876543210),
("Jane Roe",'1985-05-20',8765432109),
("James Black",'2000-03-10',7654321098),
("Emily Davis",'1995-07-25',6543210987);
INSERT INTO `Appointments`(`PatientID`,`DoctorID`,`AppointmentDate`,`Status`) VALUES
(1,1,'2024-11-01',"Scheduled"),
(2,2,'2024-11-05',"Completed"),
(3,3,'2024-11-08',"Scheduled"),
(4,4,'2024-11-10',"Cancelled");

3.


Server: 127.0.0.1 » Database: hospital_administration_system
Structure SQL Search Query Export Import Operations Privileges Routines Events Triggers Designer
Run SQL query/queries on database hospital_administration_system:
DELIMITER $$
CREATE PROCEDURE AddNewAppointment (IN p_PatientID INT,IN p_DoctorID INT, IN p_AppointmentDate DATE, IN p_Status VARCHAR(20))
BEGIN
INSERT INTO `Appointments`(`PatientID`,`DoctorID`,`AppointmentDate`,`Status`) VALUES (p_PatientID,p_DoctorID,p_AppointmentDate,p_Status);
END$$
DELIMITER ;


Server: 127.0.0.1 » Database: hospital_administration_system
Structure SQL Search Query Export Import Operations Privileges
Run SQL query/queries on database hospital_administration_system:
DELIMITER $$
CREATE PROCEDURE UpdateTreatmentCost (IN p_TreatmentID INT, IN NewCost DECIMAL(10,2))
BEGIN
UPDATE Treatments
SET TreatmentCost = NewCost
WHERE TreatmentID = p_TreatmentID;
END$$
DELIMITER ;

Server: 127.0.0.1 » Database: hospital_administration_system

Structure | SQL | Search | Query | Export | Import | Operations | Privileges | Routines

Run SQL query/queries on database hospital_administration_system:

```
DELIMITER $$

CREATE PROCEDURE GetPatientHistory (IN p_PatientID INT)
BEGIN
    SELECT p.PatientName,d.DoctorName,a.AppointmentDate,t.TreatmentDescription,t.TreatmentCost
    FROM Patients p
    INNER JOIN Appointments a ON p.PatientID = a.PatientID
    INNER JOIN Doctors d ON a.DoctorID = d.DoctorID
    LEFT JOIN Treatments t ON a.AppointmentID = t.AppointmentID
    WHERE p.PatientID = p_PatientID
    ORDER BY a.AppointmentDate;
END$$

DELIMITER ;
```

Server: 127.0.0.1 » Database: hospital_administration_system

Structure | SQL | Search | Query | Export | Import | Operations

Run SQL query/queries on database hospital_administration_system:

```
DELIMITER $$

CREATE PROCEDURE GenerateRevenueReport ()
BEGIN
    SELECT d.DoctorName,SUM(t.TreatmentCost) AS TotalRevenue
    FROM Doctors d
    INNER JOIN Appointments a ON d.DoctorID = a.DoctorID
    INNER JOIN Treatments t ON a.AppointmentID = t.AppointmentID
    GROUP BY d.DoctorName
    ORDER BY TotalRevenue DESC;
END$$

DELIMITER ;
```