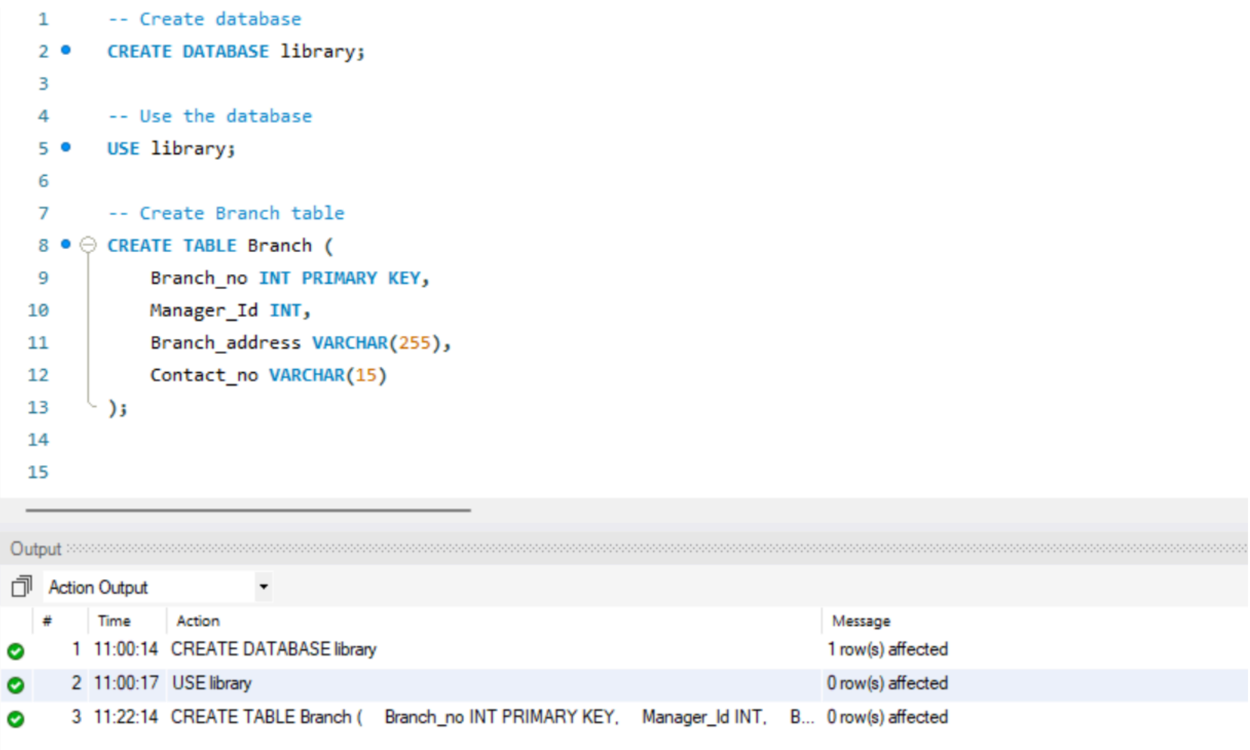
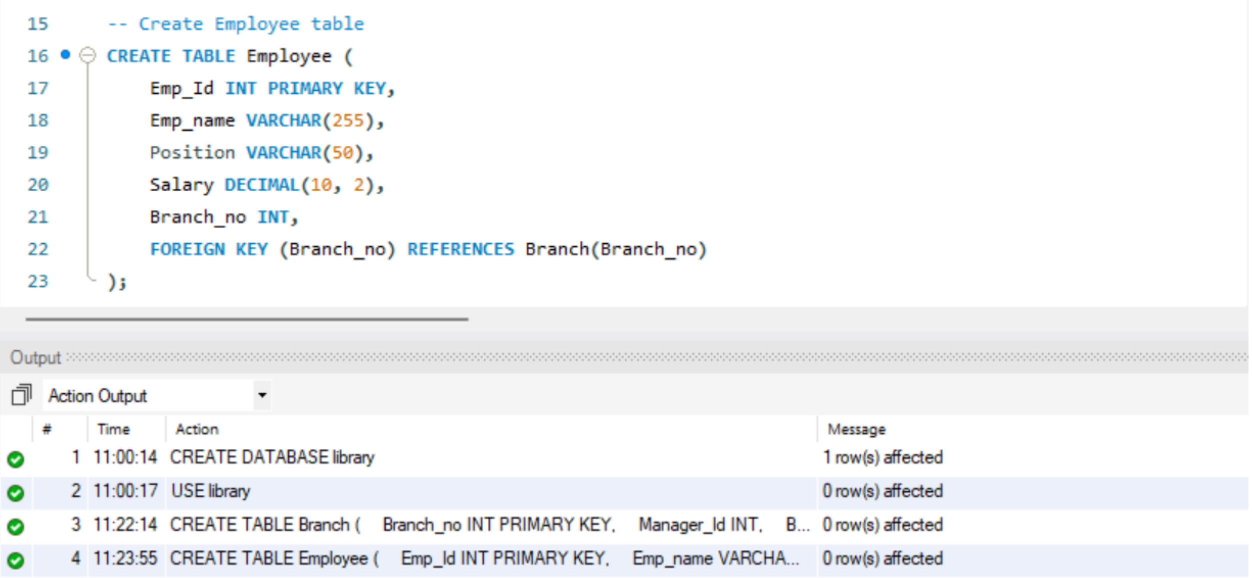


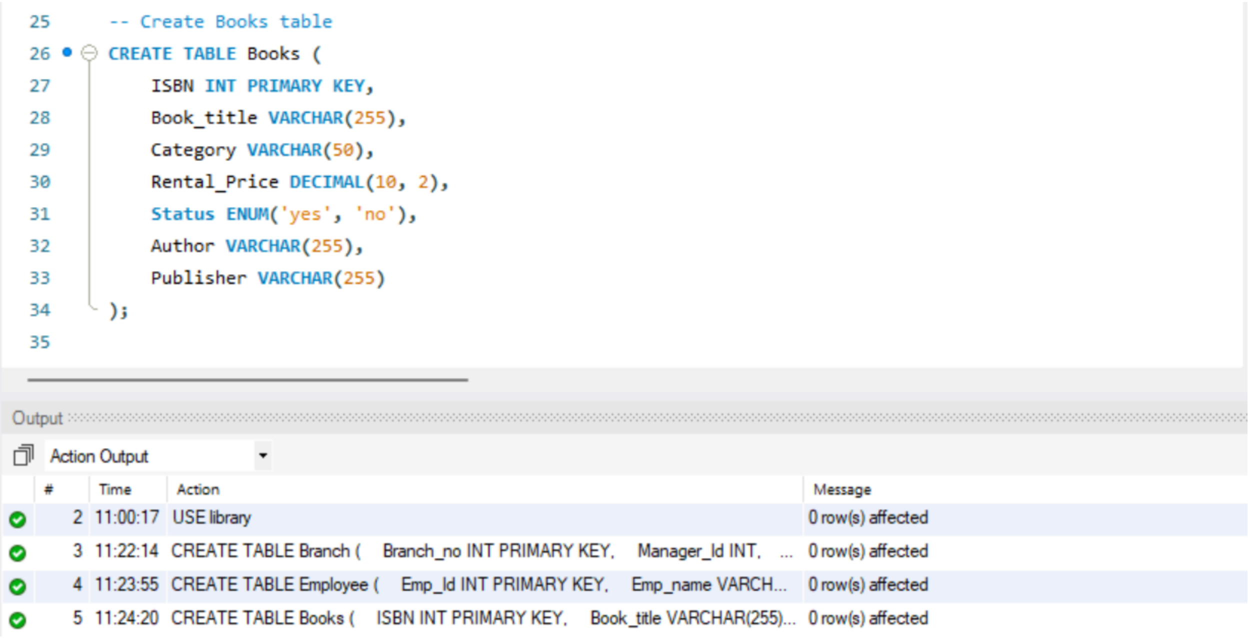
```sql
-- Create database
CREATE DATABASE library;

-- Use the database
USE library;

-- Create Branch table
CREATE TABLE Branch (
    Branch_no INT PRIMARY KEY,
    Manager_Id INT,
    Branch_address VARCHAR(255),
    Contact_no VARCHAR(15)
);


```

```
   #  Time      Action                                                                      Message
   1  11:00:14  CREATE DATABASE library                                                     1 row(s) affected
   2  11:00:17  USE library                                                                 0 row(s) affected
   3  11:22:14  CREATE TABLE Branch (   Branch_no INT PRIMARY KEY,    Manager_Id INT,    B...  0 row(s) affected
```



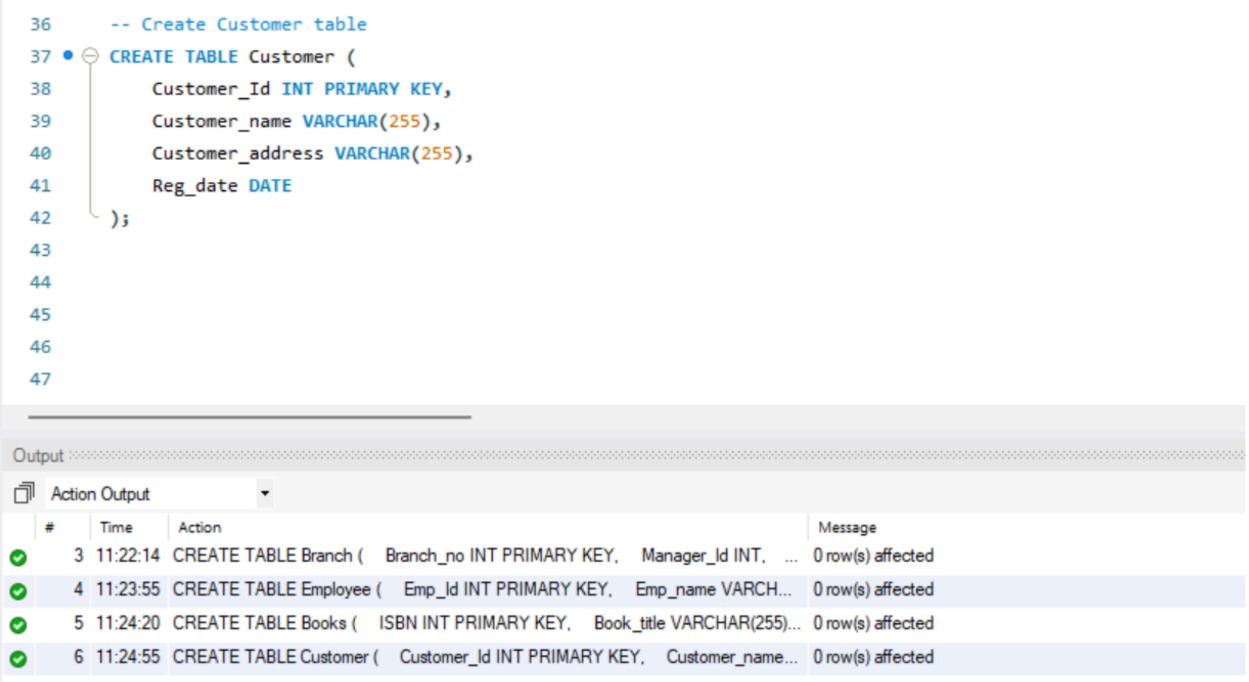
```sql
-- Create Employee table
CREATE TABLE Employee (
    Emp_Id INT PRIMARY KEY,
    Emp_name VARCHAR(255),
    Position VARCHAR(50),
    Salary DECIMAL(10, 2),
    Branch_no INT,
    FOREIGN KEY (Branch_no) REFERENCES Branch(Branch_no)
);
```

```
   #  Time      Action                                                                      Message
   1  11:00:14  CREATE DATABASE library                                                     1 row(s) affected
   2  11:00:17  USE library                                                                 0 row(s) affected
   3  11:22:14  CREATE TABLE Branch (   Branch_no INT PRIMARY KEY,    Manager_Id INT,    B...  0 row(s) affected
   4  11:23:55  CREATE TABLE Employee (   Emp_Id INT PRIMARY KEY,    Emp_name VARCHA...       0 row(s) affected
```



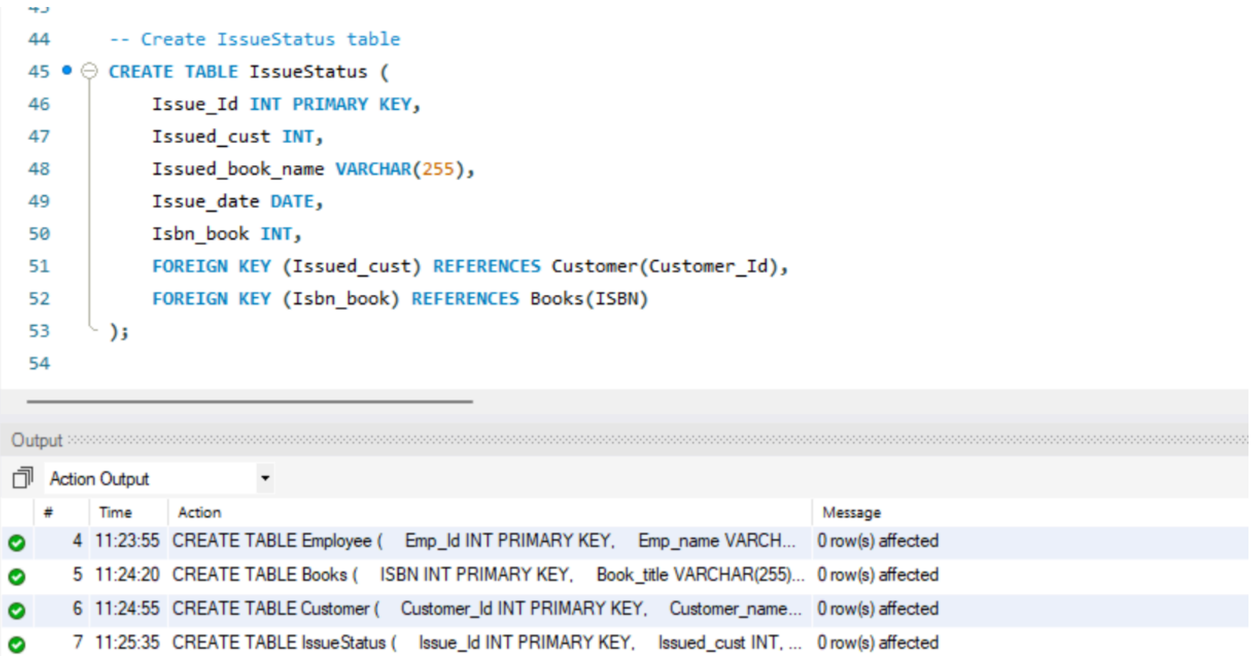
```sql
-- Create Books table
CREATE TABLE Books (
    ISBN INT PRIMARY KEY,
    Book_title VARCHAR(255),
    Category VARCHAR(50),
    Rental_Price DECIMAL(10, 2),
    Status ENUM('yes', 'no'),
    Author VARCHAR(255),
    Publisher VARCHAR(255)
);
```

```
   #  Time      Action                                                                  Message
✓  2  11:00:17  USE library                                                             0 row(s) affected
✓  3  11:22:14  CREATE TABLE Branch (    Branch_no INT PRIMARY KEY,    Manager_Id INT,  ...  0 row(s) affected
✓  4  11:23:55  CREATE TABLE Employee (    Emp_Id INT PRIMARY KEY,    Emp_name VARCH...   0 row(s) affected
✓  5  11:24:20  CREATE TABLE Books (    ISBN INT PRIMARY KEY,    Book_title VARCHAR(255)...  0 row(s) affected
```



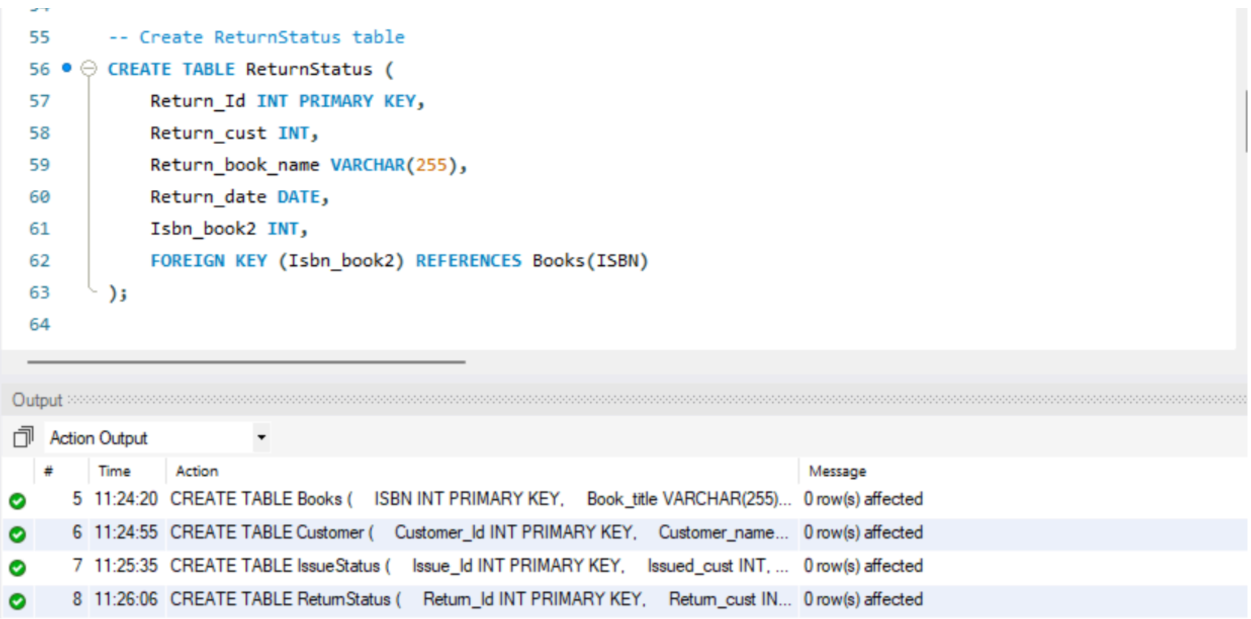
```sql
-- Create Customer table
CREATE TABLE Customer (
    Customer_Id INT PRIMARY KEY,
    Customer_name VARCHAR(255),
    Customer_address VARCHAR(255),
    Reg_date DATE
);
```

```
   #  Time      Action                                                                  Message
✓  3  11:22:14  CREATE TABLE Branch (    Branch_no INT PRIMARY KEY,    Manager_Id INT,  ...  0 row(s) affected
✓  4  11:23:55  CREATE TABLE Employee (    Emp_Id INT PRIMARY KEY,    Emp_name VARCH...   0 row(s) affected
✓  5  11:24:20  CREATE TABLE Books (    ISBN INT PRIMARY KEY,    Book_title VARCHAR(255)...  0 row(s) affected
✓  6  11:24:55  CREATE TABLE Customer (    Customer_Id INT PRIMARY KEY,    Customer_name...  0 row(s) affected
```



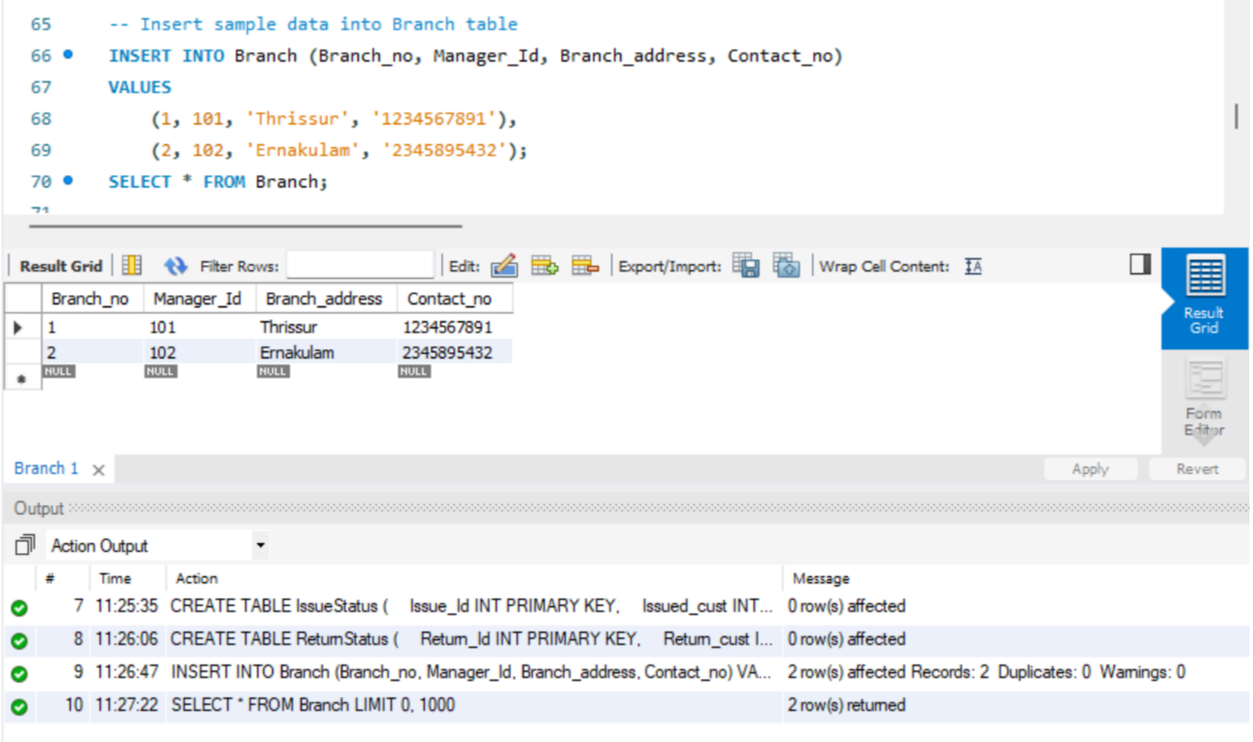
```sql
-- Create IssueStatus table
CREATE TABLE IssueStatus (
    Issue_Id INT PRIMARY KEY,
    Issued_cust INT,
    Issued_book_name VARCHAR(255),
    Issue_date DATE,
    Isbn_book INT,
    FOREIGN KEY (Issued_cust) REFERENCES Customer(Customer_Id),
    FOREIGN KEY (Isbn_book) REFERENCES Books(ISBN)
);
```

```
#  Time      Action                                                                   Message
4  11:23:55  CREATE TABLE Employee (   Emp_Id INT PRIMARY KEY,    Emp_name VARCH...   0 row(s) affected
5  11:24:20  CREATE TABLE Books (   ISBN INT PRIMARY KEY,    Book_title VARCHAR(255)...  0 row(s) affected
6  11:24:55  CREATE TABLE Customer (   Customer_Id INT PRIMARY KEY,    Customer_name...  0 row(s) affected
7  11:25:35  CREATE TABLE IssueStatus (   Issue_Id INT PRIMARY KEY,    Issued_cust INT, ...  0 row(s) affected
```



```sql
-- Create ReturnStatus table
CREATE TABLE ReturnStatus (
    Return_Id INT PRIMARY KEY,
    Return_cust INT,
    Return_book_name VARCHAR(255),
    Return_date DATE,
    Isbn_book2 INT,
    FOREIGN KEY (Isbn_book2) REFERENCES Books(ISBN)
);
```

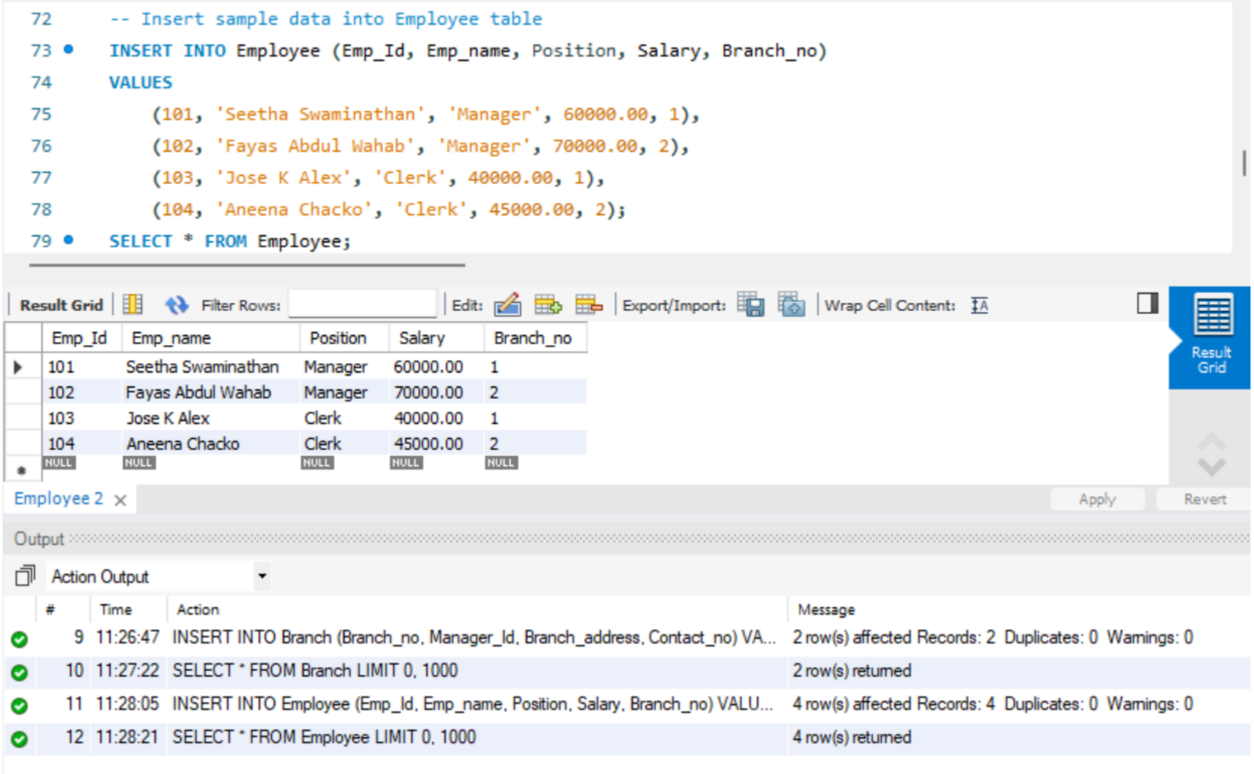
```
#  Time      Action                                                                   Message
5  11:24:20  CREATE TABLE Books (   ISBN INT PRIMARY KEY,    Book_title VARCHAR(255)...  0 row(s) affected
6  11:24:55  CREATE TABLE Customer (   Customer_Id INT PRIMARY KEY,    Customer_name...  0 row(s) affected
7  11:25:35  CREATE TABLE IssueStatus (   Issue_Id INT PRIMARY KEY,    Issued_cust INT, ...  0 row(s) affected
8  11:26:06  CREATE TABLE ReturnStatus (   Return_Id INT PRIMARY KEY,    Return_cust IN...  0 row(s) affected
```



```sql
-- Insert sample data into Branch table
INSERT INTO Branch (Branch_no, Manager_Id, Branch_address, Contact_no)
VALUES
    (1, 101, 'Thrissur', '1234567891'),
    (2, 102, 'Ernakulam', '2345895432');
SELECT * FROM Branch;
```

| Branch_no | Manager_Id | Branch_address | Contact_no |
|---|---|---|---|
| 1 | 101 | Thrissur | 1234567891 |
| 2 | 102 | Ernakulam | 2345895432 |
| NULL | NULL | NULL | NULL |

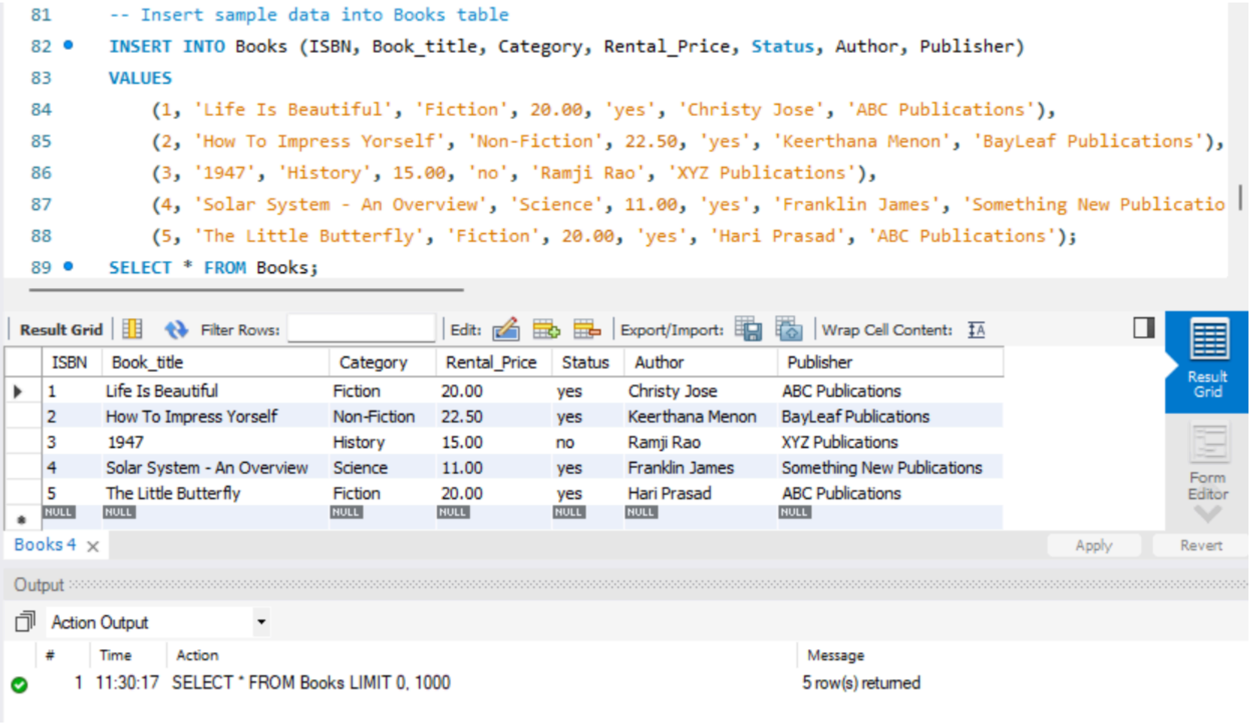
| # | Time | Action | Message |
|---|---|---|---|
| 7 | 11:25:35 | CREATE TABLE IssueStatus (    Issue_Id INT PRIMARY KEY,    Issued_cust INT... | 0 row(s) affected |
| 8 | 11:26:06 | CREATE TABLE ReturnStatus (    Return_Id INT PRIMARY KEY,    Return_cust I... | 0 row(s) affected |
| 9 | 11:26:47 | INSERT INTO Branch (Branch_no, Manager_Id, Branch_address, Contact_no) VA... | 2 row(s) affected Records: 2  Duplicates: 0  Warnings: 0 |
| 10 | 11:27:22 | SELECT * FROM Branch LIMIT 0, 1000 | 2 row(s) returned |



```sql
-- Insert sample data into Employee table
INSERT INTO Employee (Emp_Id, Emp_name, Position, Salary, Branch_no)
VALUES
    (101, 'Seetha Swaminathan', 'Manager', 60000.00, 1),
    (102, 'Fayas Abdul Wahab', 'Manager', 70000.00, 2),
    (103, 'Jose K Alex', 'Clerk', 40000.00, 1),
    (104, 'Aneena Chacko', 'Clerk', 45000.00, 2);
SELECT * FROM Employee;
```

| Emp_Id | Emp_name | Position | Salary | Branch_no |
|---|---|---|---|---|
| 101 | Seetha Swaminathan | Manager | 60000.00 | 1 |
| 102 | Fayas Abdul Wahab | Manager | 70000.00 | 2 |
| 103 | Jose K Alex | Clerk | 40000.00 | 1 |
| 104 | Aneena Chacko | Clerk | 45000.00 | 2 |
| NULL | NULL | NULL | NULL | NULL |

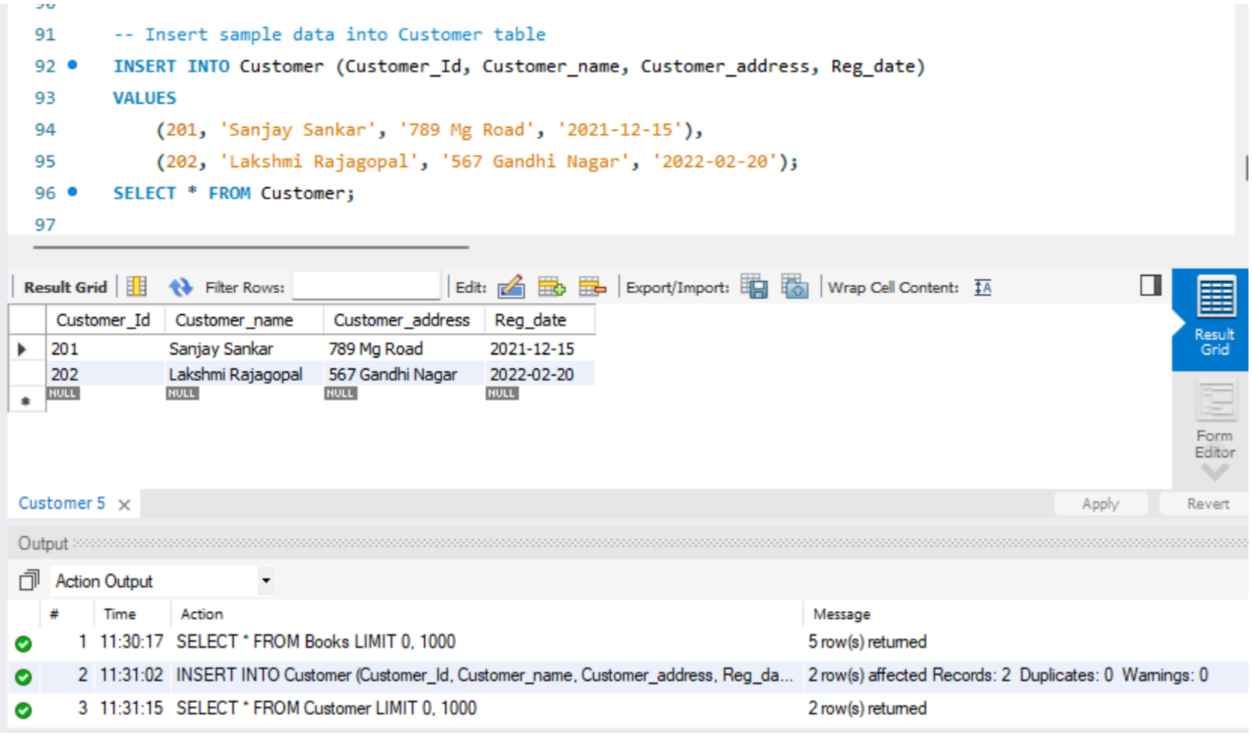
| # | Time | Action | Message |
|---|---|---|---|
| 9 | 11:26:47 | INSERT INTO Branch (Branch_no, Manager_Id, Branch_address, Contact_no) VA... | 2 row(s) affected Records: 2  Duplicates: 0  Warnings: 0 |
| 10 | 11:27:22 | SELECT * FROM Branch LIMIT 0, 1000 | 2 row(s) returned |
| 11 | 11:28:05 | INSERT INTO Employee (Emp_Id, Emp_name, Position, Salary, Branch_no) VALU... | 4 row(s) affected Records: 4  Duplicates: 0  Warnings: 0 |
| 12 | 11:28:21 | SELECT * FROM Employee LIMIT 0, 1000 | 4 row(s) returned |



```sql
-- Insert sample data into Books table
INSERT INTO Books (ISBN, Book_title, Category, Rental_Price, Status, Author, Publisher)
VALUES
    (1, 'Life Is Beautiful', 'Fiction', 20.00, 'yes', 'Christy Jose', 'ABC Publications'),
    (2, 'How To Impress Yorself', 'Non-Fiction', 22.50, 'yes', 'Keerthana Menon', 'BayLeaf Publications'),
    (3, '1947', 'History', 15.00, 'no', 'Ramji Rao', 'XYZ Publications'),
    (4, 'Solar System - An Overview', 'Science', 11.00, 'yes', 'Franklin James', 'Something New Publicatio
    (5, 'The Little Butterfly', 'Fiction', 20.00, 'yes', 'Hari Prasad', 'ABC Publications');
SELECT * FROM Books;
```

| ISBN | Book_title | Category | Rental_Price | Status | Author | Publisher |
|---|---|---|---|---|---|---|
| 1 | Life Is Beautiful | Fiction | 20.00 | yes | Christy Jose | ABC Publications |
| 2 | How To Impress Yorself | Non-Fiction | 22.50 | yes | Keerthana Menon | BayLeaf Publications |
| 3 | 1947 | History | 15.00 | no | Ramji Rao | XYZ Publications |
| 4 | Solar System - An Overview | Science | 11.00 | yes | Franklin James | Something New Publications |
| 5 | The Little Butterfly | Fiction | 20.00 | yes | Hari Prasad | ABC Publications |
| NULL | NULL | NULL | NULL | NULL | NULL | NULL |

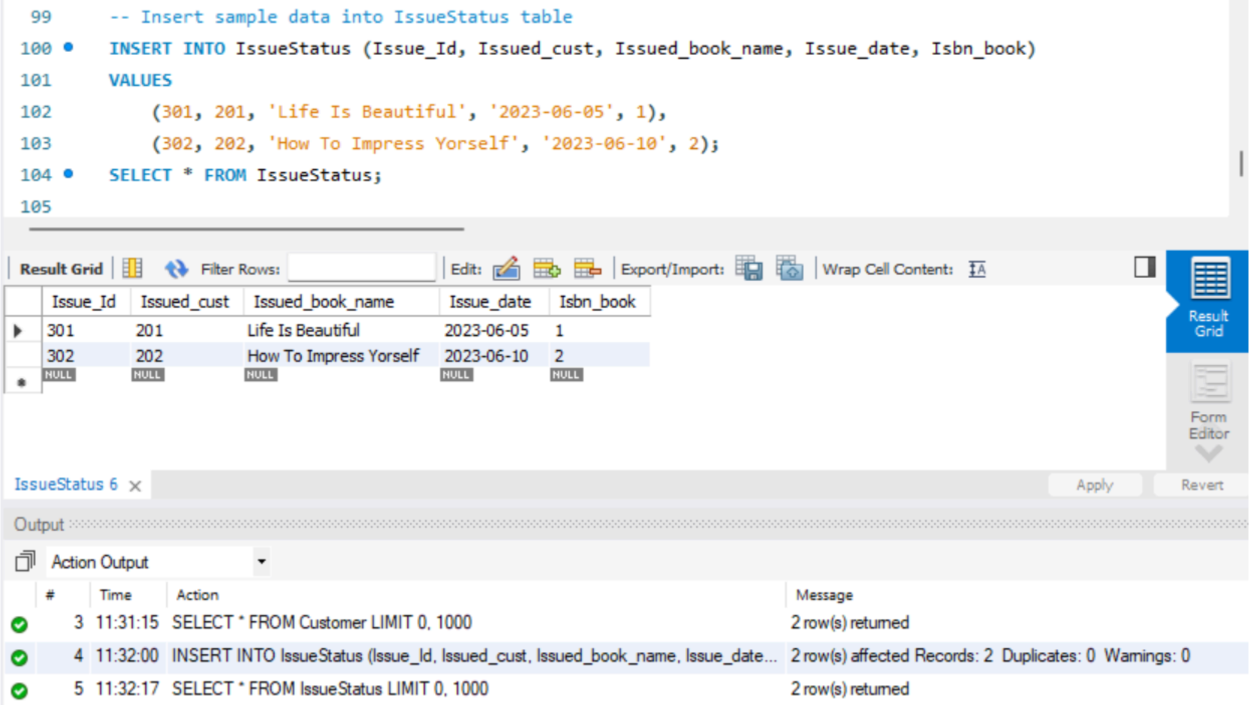
| # | Time | Action | Message |
|---|---|---|---|
| 1 | 11:30:17 | SELECT * FROM Books LIMIT 0, 1000 | 5 row(s) returned |



```sql
-- Insert sample data into Customer table
INSERT INTO Customer (Customer_Id, Customer_name, Customer_address, Reg_date)
VALUES
    (201, 'Sanjay Sankar', '789 Mg Road', '2021-12-15'),
    (202, 'Lakshmi Rajagopal', '567 Gandhi Nagar', '2022-02-20');
SELECT * FROM Customer;
```

| Customer_Id | Customer_name | Customer_address | Reg_date |
|---|---|---|---|
| 201 | Sanjay Sankar | 789 Mg Road | 2021-12-15 |
| 202 | Lakshmi Rajagopal | 567 Gandhi Nagar | 2022-02-20 |
| NULL | NULL | NULL | NULL |

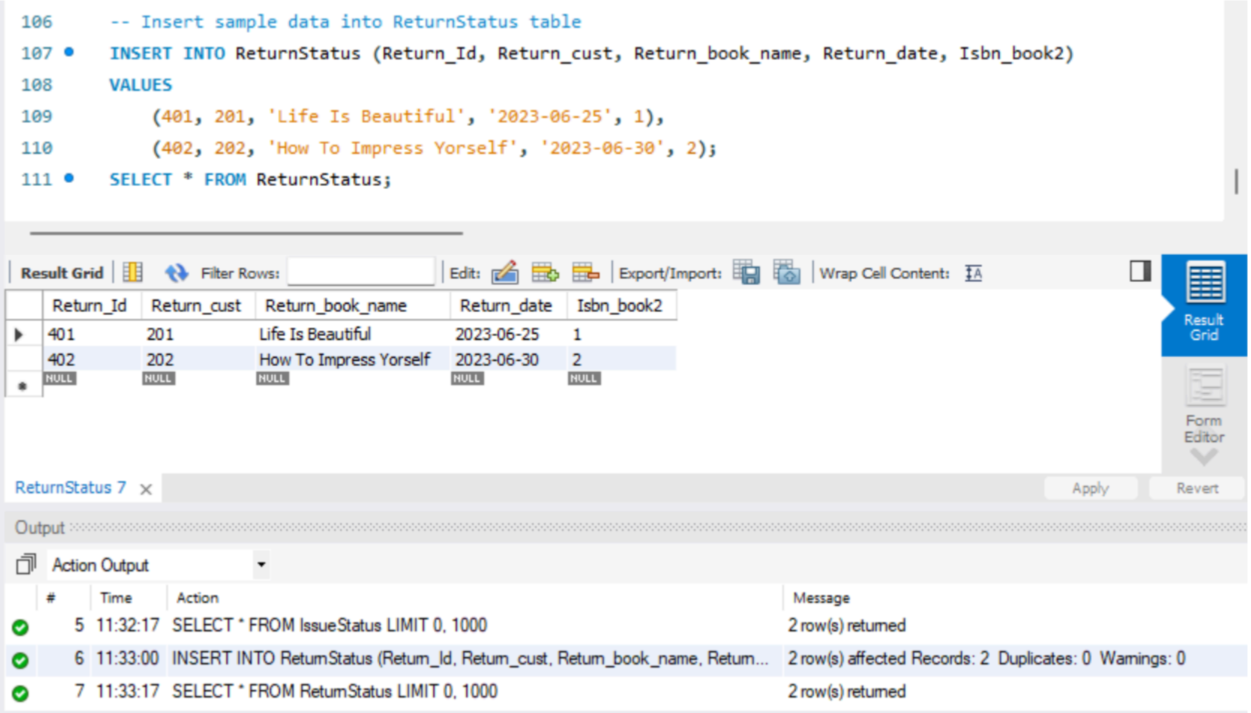
| # | Time | Action | Message |
|---|---|---|---|
| 1 | 11:30:17 | SELECT * FROM Books LIMIT 0, 1000 | 5 row(s) returned |
| 2 | 11:31:02 | INSERT INTO Customer (Customer_Id, Customer_name, Customer_address, Reg_da... | 2 row(s) affected Records: 2 Duplicates: 0 Warnings: 0 |
| 3 | 11:31:15 | SELECT * FROM Customer LIMIT 0, 1000 | 2 row(s) returned |



```sql
-- Insert sample data into IssueStatus table
INSERT INTO IssueStatus (Issue_Id, Issued_cust, Issued_book_name, Issue_date, Isbn_book)
VALUES
    (301, 201, 'Life Is Beautiful', '2023-06-05', 1),
    (302, 202, 'How To Impress Yorself', '2023-06-10', 2);
SELECT * FROM IssueStatus;
```

| Issue_Id | Issued_cust | Issued_book_name | Issue_date | Isbn_book |
|---|---|---|---|---|
| 301 | 201 | Life Is Beautiful | 2023-06-05 | 1 |
| 302 | 202 | How To Impress Yorself | 2023-06-10 | 2 |
| NULL | NULL | NULL | NULL | NULL |

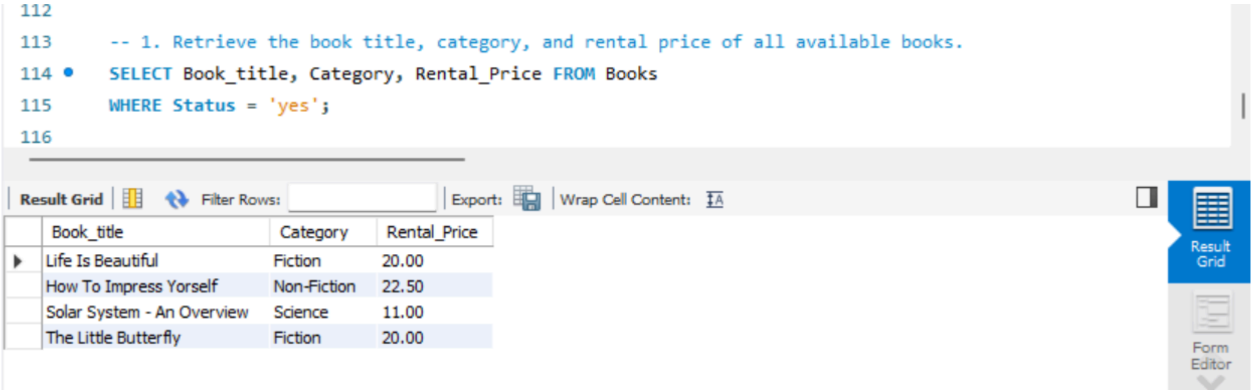
```
#  Time      Action                                                                      Message
3  11:31:15  SELECT * FROM Customer LIMIT 0, 1000                                        2 row(s) returned
4  11:32:00  INSERT INTO IssueStatus (Issue_Id, Issued_cust, Issued_book_name, Issue_date...  2 row(s) affected Records: 2  Duplicates: 0  Warnings: 0
5  11:32:17  SELECT * FROM IssueStatus LIMIT 0, 1000                                     2 row(s) returned
```



```sql
-- Insert sample data into ReturnStatus table
INSERT INTO ReturnStatus (Return_Id, Return_cust, Return_book_name, Return_date, Isbn_book2)
VALUES
    (401, 201, 'Life Is Beautiful', '2023-06-25', 1),
    (402, 202, 'How To Impress Yorself', '2023-06-30', 2);
SELECT * FROM ReturnStatus;
```

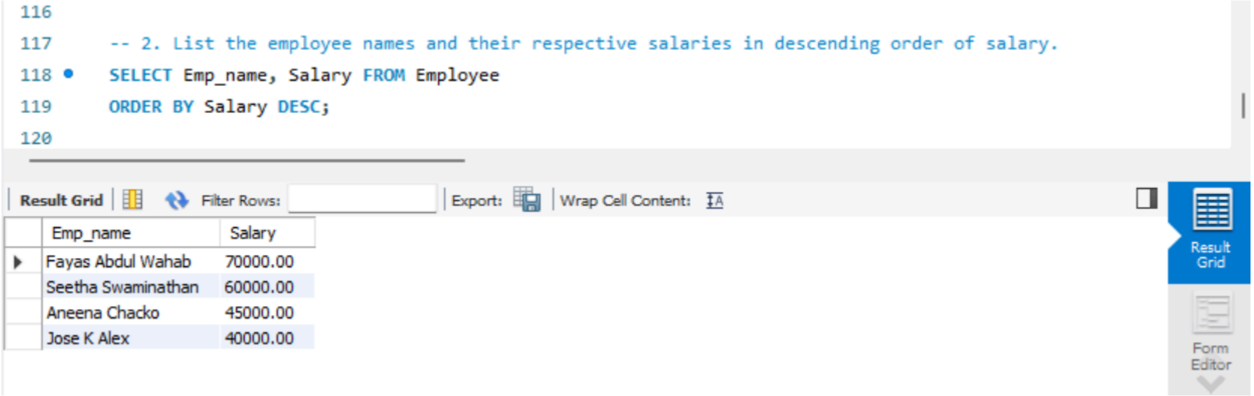
| Return_Id | Return_cust | Return_book_name | Return_date | Isbn_book2 |
|---|---|---|---|---|
| 401 | 201 | Life Is Beautiful | 2023-06-25 | 1 |
| 402 | 202 | How To Impress Yorself | 2023-06-30 | 2 |
| NULL | NULL | NULL | NULL | NULL |

```
#  Time      Action                                                                      Message
5  11:32:17  SELECT * FROM IssueStatus LIMIT 0, 1000                                     2 row(s) returned
6  11:33:00  INSERT INTO ReturnStatus (Return_Id, Return_cust, Return_book_name, Return...  2 row(s) affected Records: 2  Duplicates: 0  Warnings: 0
7  11:33:17  SELECT * FROM ReturnStatus LIMIT 0, 1000                                    2 row(s) returned
```



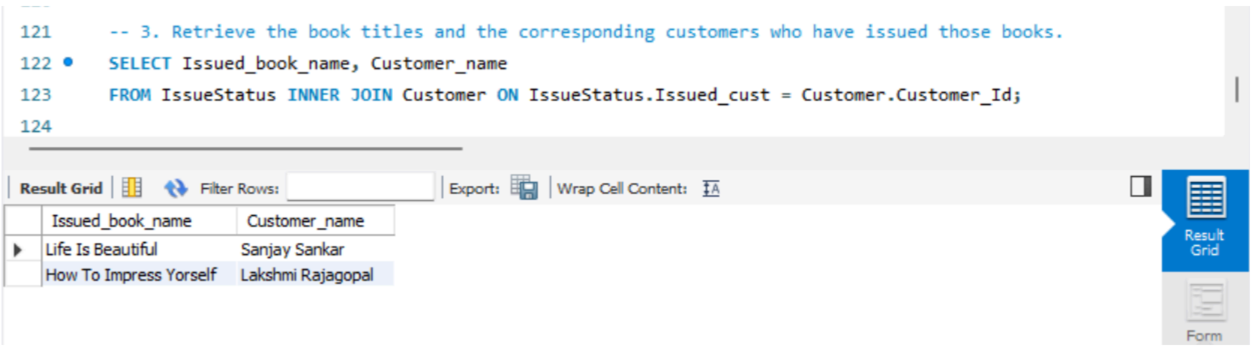
```sql
-- 1. Retrieve the book title, category, and rental price of all available books.
SELECT Book_title, Category, Rental_Price FROM Books
WHERE Status = 'yes';
```

| Book_title | Category | Rental_Price |
|---|---|---|
| Life Is Beautiful | Fiction | 20.00 |
| How To Impress Yorself | Non-Fiction | 22.50 |
| Solar System - An Overview | Science | 11.00 |
| The Little Butterfly | Fiction | 20.00 |



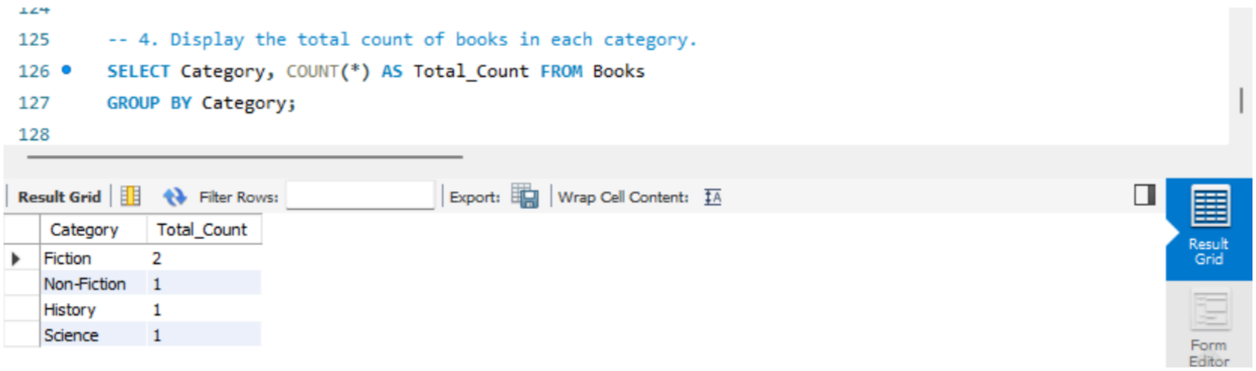
```sql
-- 2. List the employee names and their respective salaries in descending order of salary.
SELECT Emp_name, Salary FROM Employee
ORDER BY Salary DESC;
```

| Emp_name | Salary |
|---|---|
| Fayas Abdul Wahab | 70000.00 |
| Seetha Swaminathan | 60000.00 |
| Aneena Chacko | 45000.00 |
| Jose K Alex | 40000.00 |



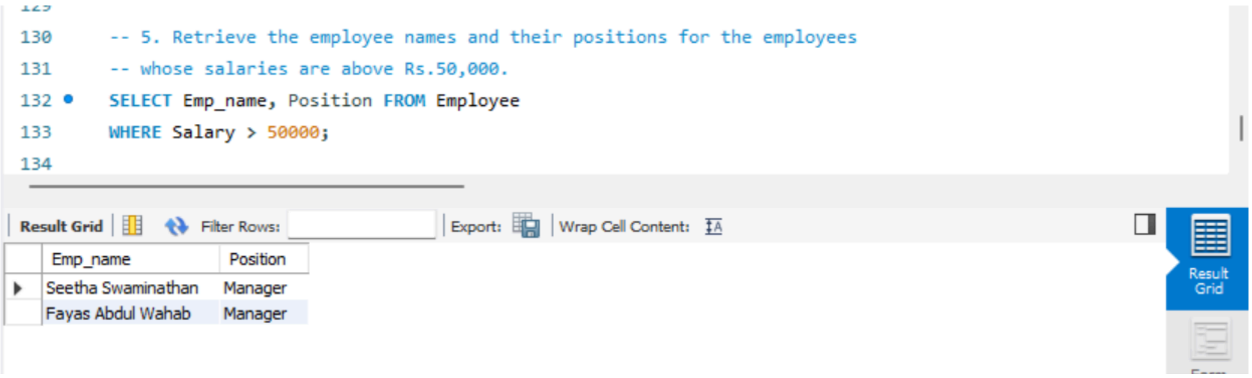
```sql
-- 3. Retrieve the book titles and the corresponding customers who have issued those books.
SELECT Issued_book_name, Customer_name
FROM IssueStatus INNER JOIN Customer ON IssueStatus.Issued_cust = Customer.Customer_Id;
```

| Issued_book_name | Customer_name |
|---|---|
| Life Is Beautiful | Sanjay Sankar |
| How To Impress Yorself | Lakshmi Rajagopal |



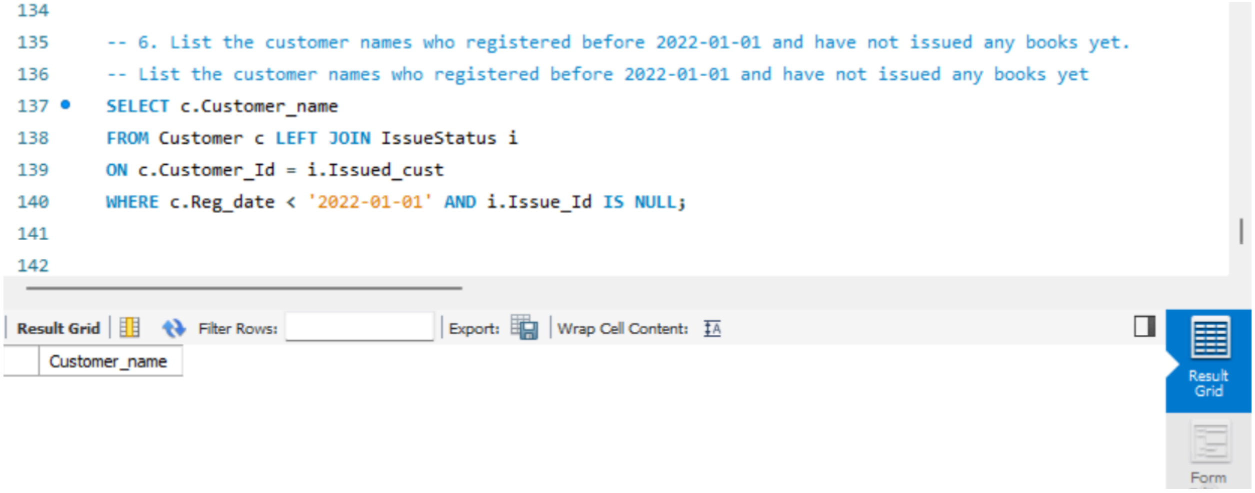
```sql
-- 4. Display the total count of books in each category.
SELECT Category, COUNT(*) AS Total_Count FROM Books
GROUP BY Category;
```

| Category | Total_Count |
|---|---|
| Fiction | 2 |
| Non-Fiction | 1 |
| History | 1 |
| Science | 1 |



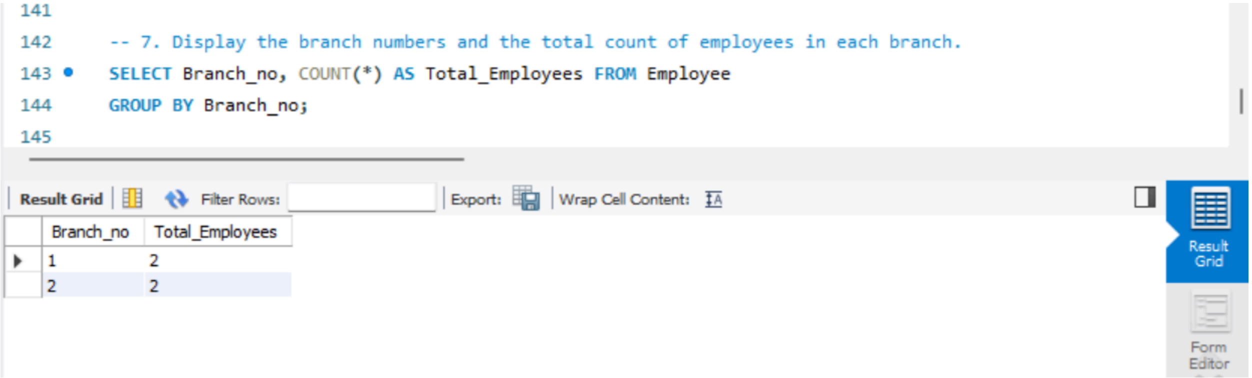
```sql
-- 5. Retrieve the employee names and their positions for the employees
-- whose salaries are above Rs.50,000.
SELECT Emp_name, Position FROM Employee
WHERE Salary > 50000;
```

| Emp_name | Position |
|---|---|
| Seetha Swaminathan | Manager |
| Fayas Abdul Wahab | Manager |



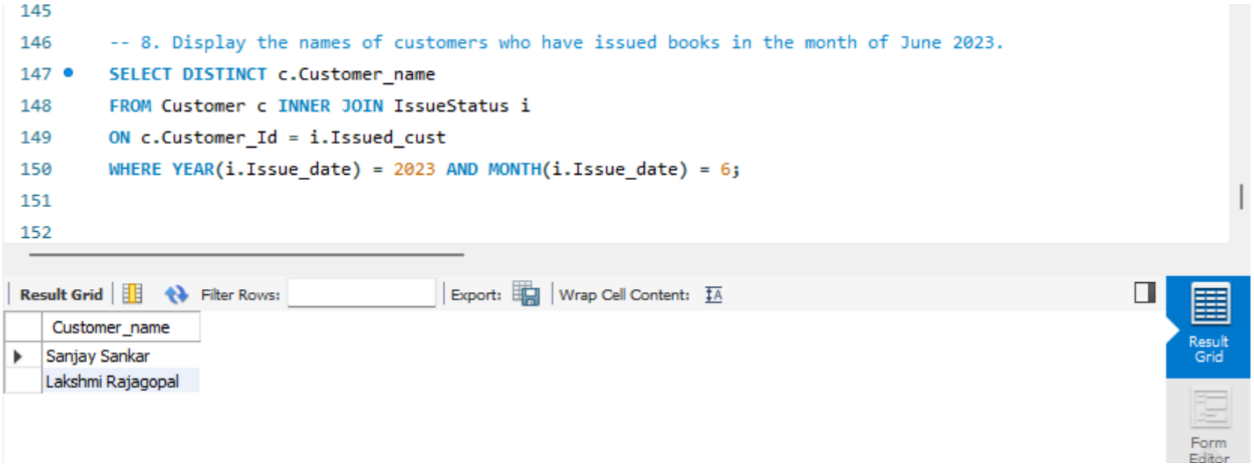
```sql
-- 6. List the customer names who registered before 2022-01-01 and have not issued any books yet.
-- List the customer names who registered before 2022-01-01 and have not issued any books yet
SELECT c.Customer_name
FROM Customer c LEFT JOIN IssueStatus i
ON c.Customer_Id = i.Issued_cust
WHERE c.Reg_date < '2022-01-01' AND i.Issue_Id IS NULL;
```

| Customer_name |
|---|



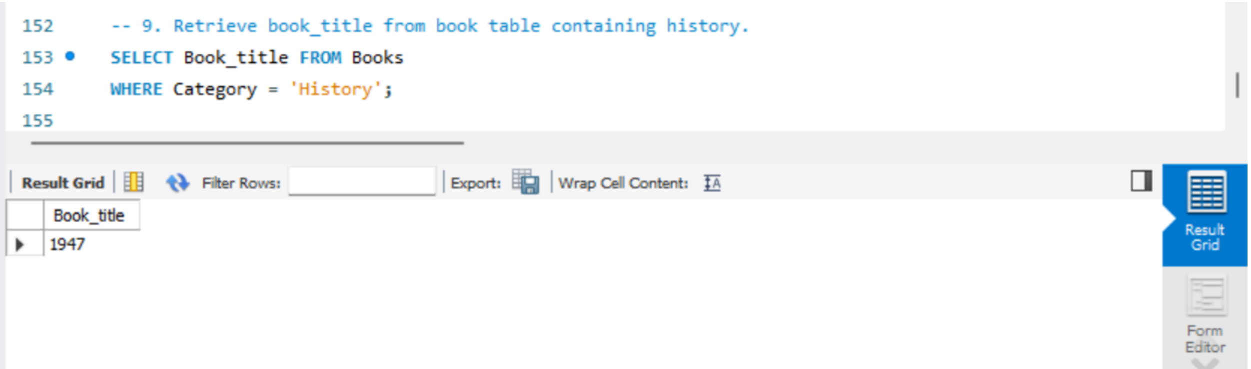
```sql
-- 7. Display the branch numbers and the total count of employees in each branch.
SELECT Branch_no, COUNT(*) AS Total_Employees FROM Employee
GROUP BY Branch_no;
```

| Branch_no | Total_Employees |
|---|---|
| 1 | 2 |
| 2 | 2 |



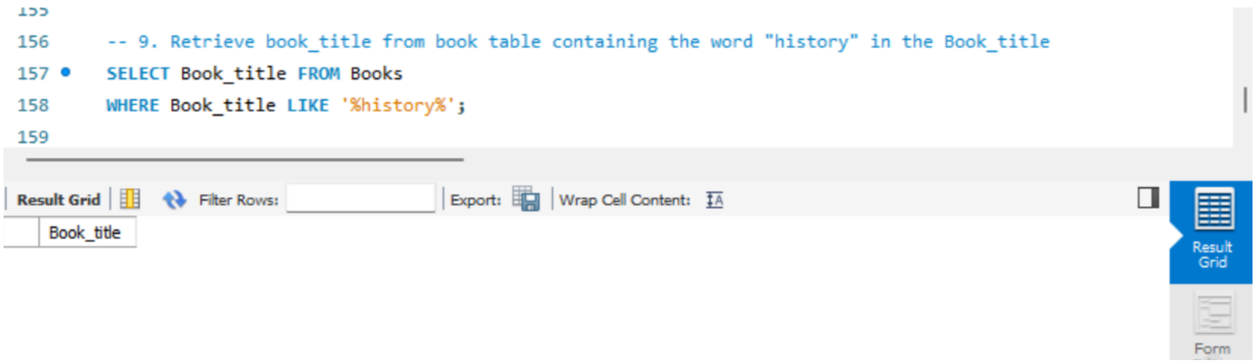
```sql
-- 8. Display the names of customers who have issued books in the month of June 2023.
SELECT DISTINCT c.Customer_name
FROM Customer c INNER JOIN IssueStatus i
ON c.Customer_Id = i.Issued_cust
WHERE YEAR(i.Issue_date) = 2023 AND MONTH(i.Issue_date) = 6;
```

| Customer_name |
|---|
| Sanjay Sankar |
| Lakshmi Rajagopal |



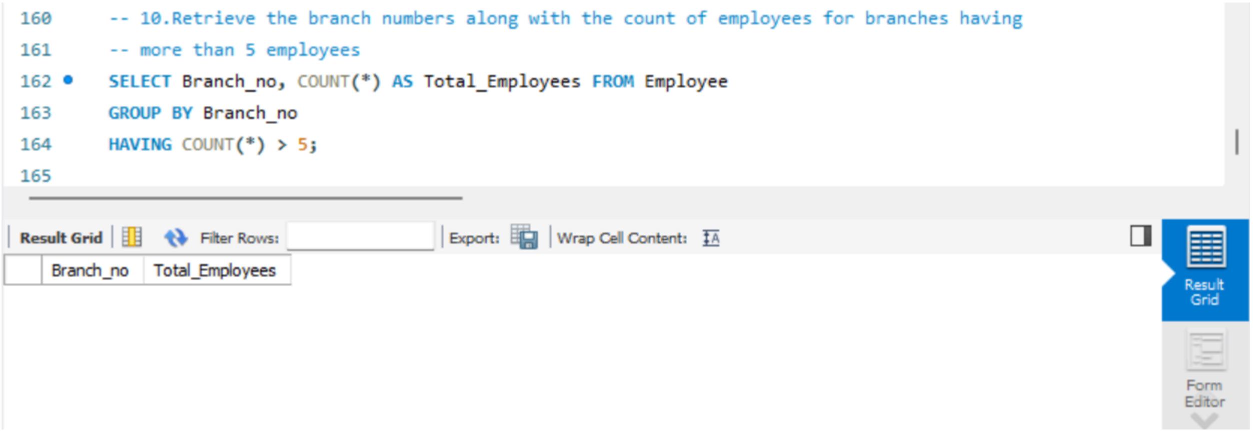
```sql
-- 9. Retrieve book_title from book table containing history.
SELECT Book_title FROM Books
WHERE Category = 'History';
```

| Book_title |
|---|
| 1947 |



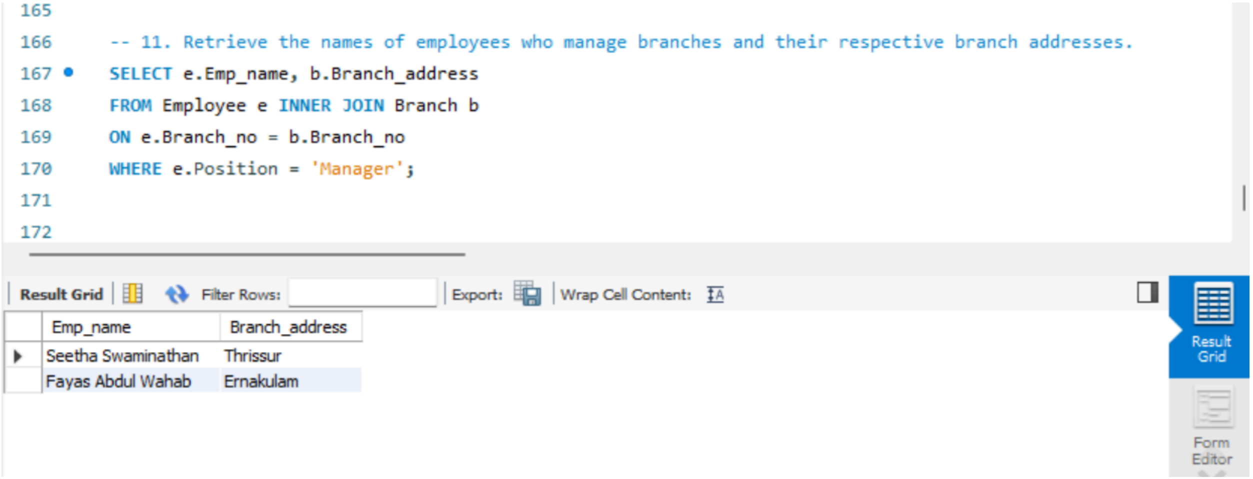
```sql
-- 9. Retrieve book_title from book table containing the word "history" in the Book_title
SELECT Book_title FROM Books
WHERE Book_title LIKE '%history%';
```

| Book_title |
|---|



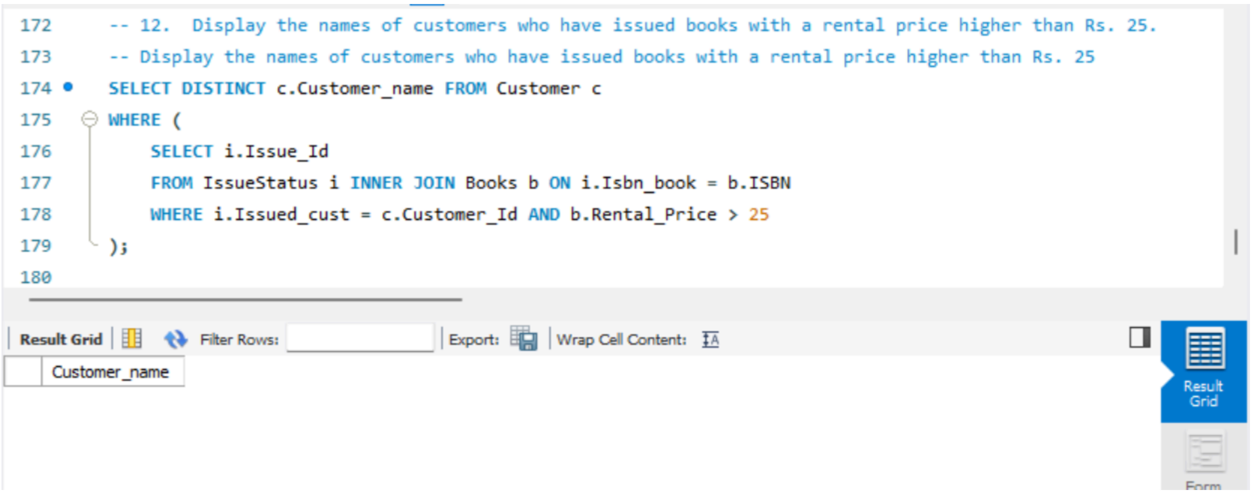
```sql
-- 10.Retrieve the branch numbers along with the count of employees for branches having
-- more than 5 employees
SELECT Branch_no, COUNT(*) AS Total_Employees FROM Employee
GROUP BY Branch_no
HAVING COUNT(*) > 5;
```

| Branch_no | Total_Employees |
|---|---|



```sql
-- 11. Retrieve the names of employees who manage branches and their respective branch addresses.
SELECT e.Emp_name, b.Branch_address
FROM Employee e INNER JOIN Branch b
ON e.Branch_no = b.Branch_no
WHERE e.Position = 'Manager';
```

| Emp_name | Branch_address |
|---|---|
| Seetha Swaminathan | Thrissur |
| Fayas Abdul Wahab | Ernakulam |



```sql
-- 12.  Display the names of customers who have issued books with a rental price higher than Rs. 25.
-- Display the names of customers who have issued books with a rental price higher than Rs. 25
SELECT DISTINCT c.Customer_name FROM Customer c
WHERE (
    SELECT i.Issue_Id
    FROM IssueStatus i INNER JOIN Books b ON i.Isbn_book = b.ISBN
    WHERE i.Issued_cust = c.Customer_Id AND b.Rental_Price > 25
);
```

| | Customer_name |
|---|---|