Module 2: Library Management System

Submitted by: Akash Aniyeri

TO: DR.Jitha P Nair

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***Topic: Library Management System***

Create a database named library and following TABLES in the database:

1. Branch

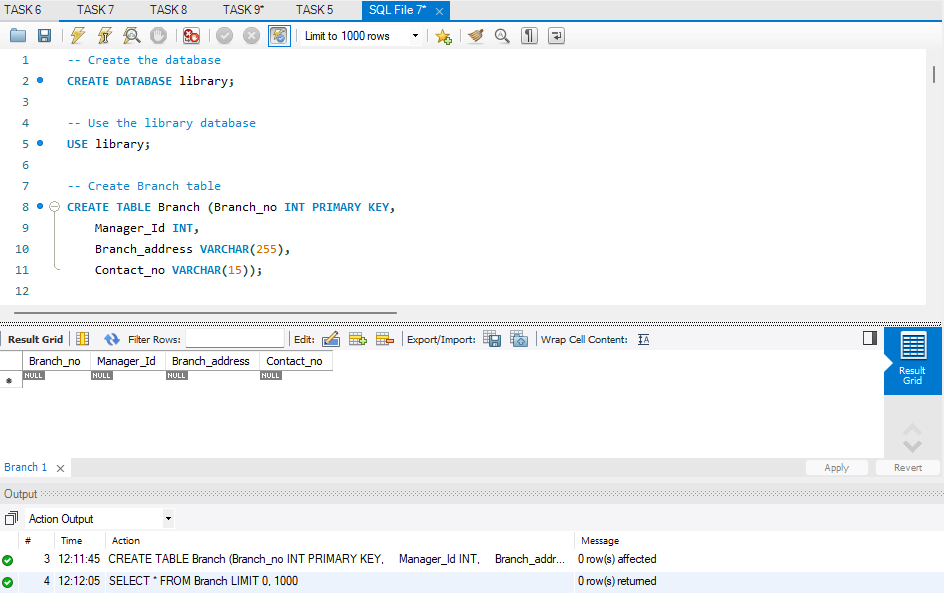
2. Employee

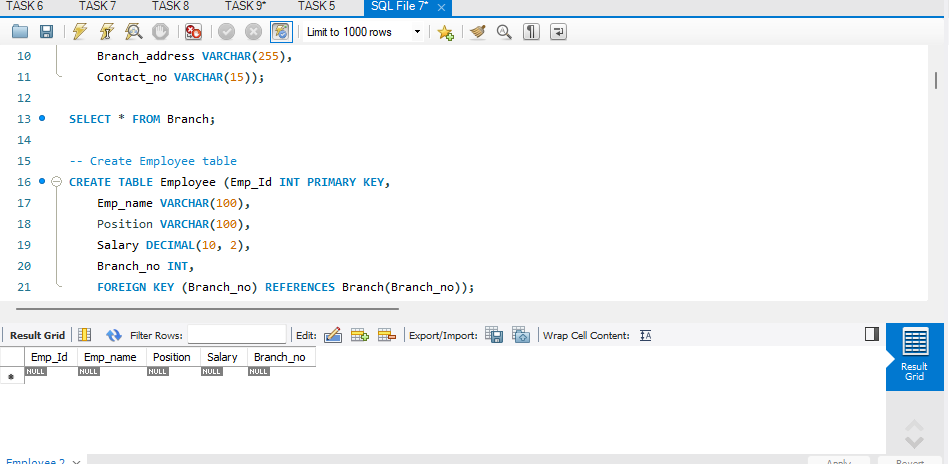
3. Books

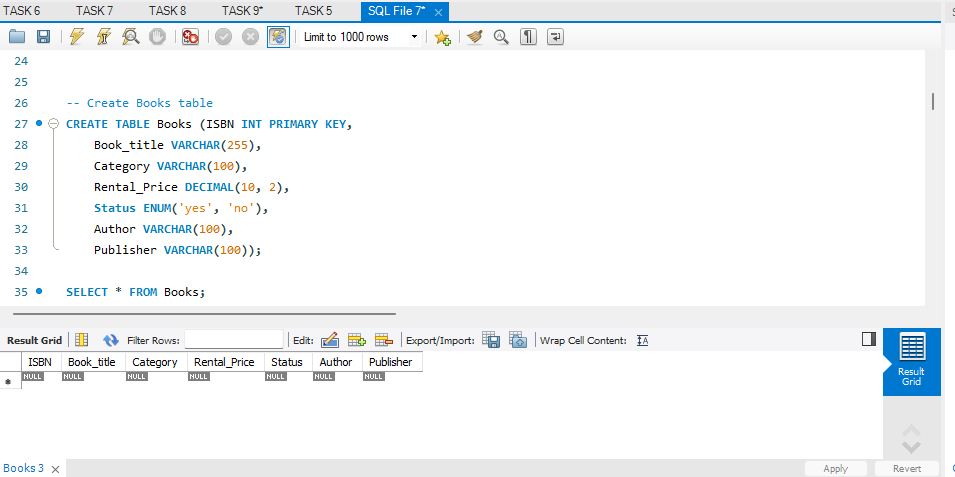
4. Customer

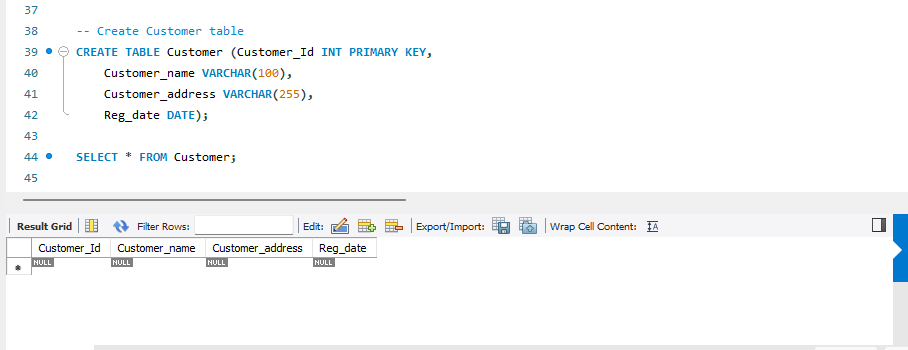
5. IssueStatus

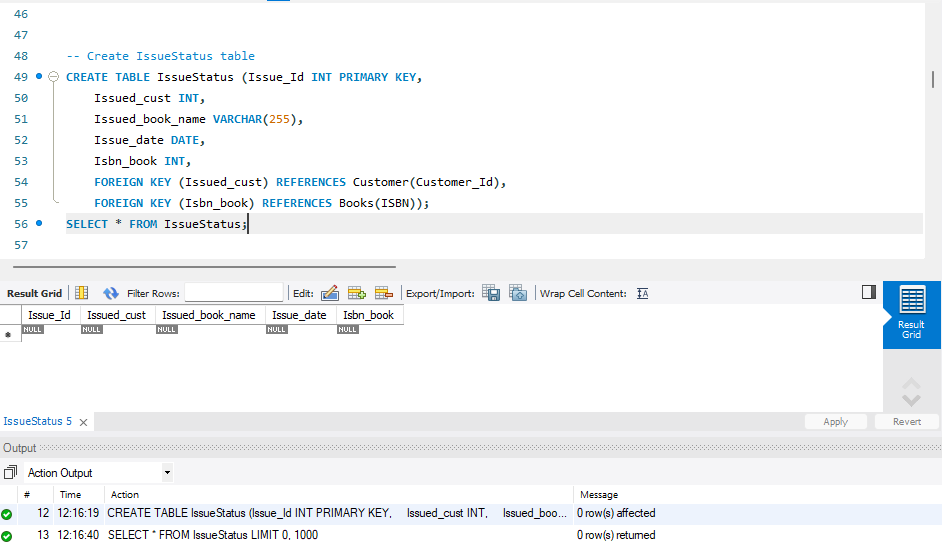
6. ReturnStatus

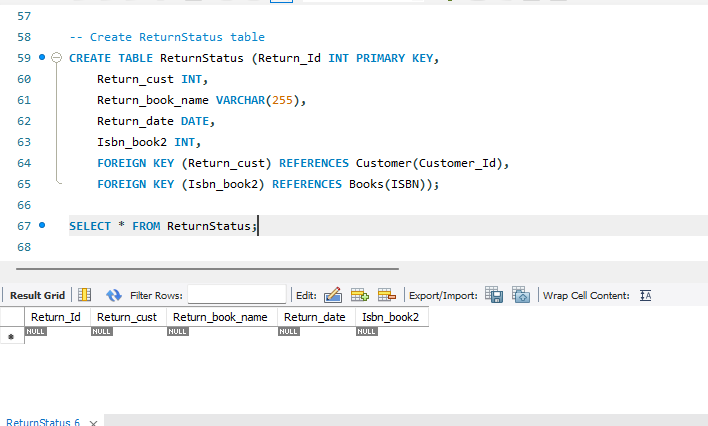












\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Attributes for the tables:

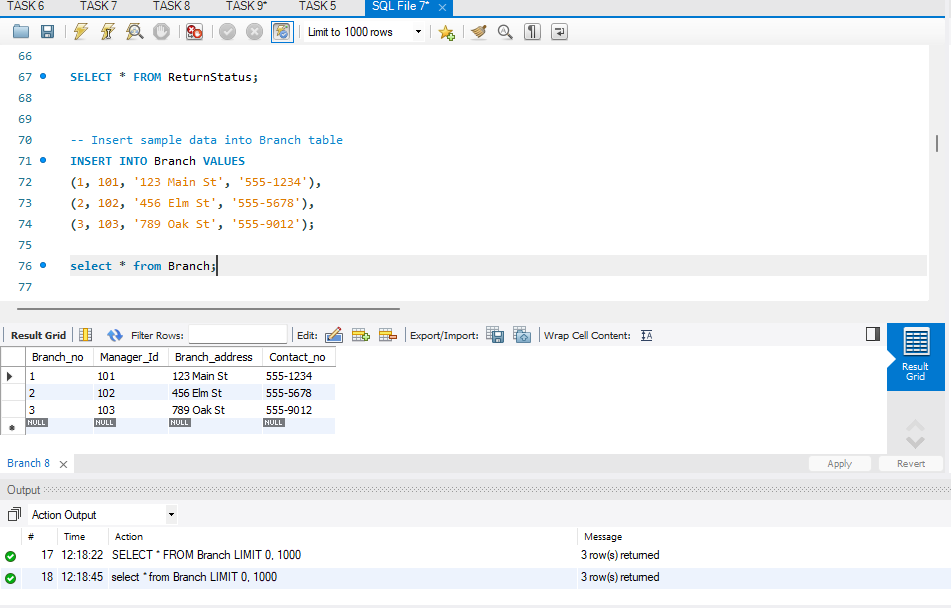
1. Branch

Branch\_no - Set as PRIMARY KEY

Manager\_Id

Branch\_address

Contact\_no



2. Employee

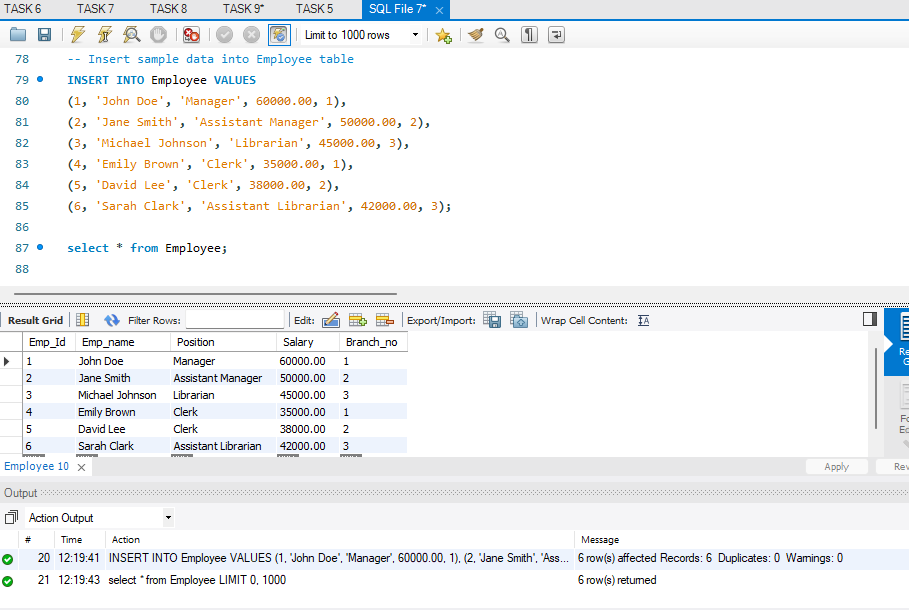
Emp\_Id – Set as PRIMARY KEY

Emp\_name

Position

Salary

Branch\_no - Set as FOREIGN KEY and it refer Branch\_no in Branch table



3. Books

ISBN - Set as PRIMARY KEY

Book\_title

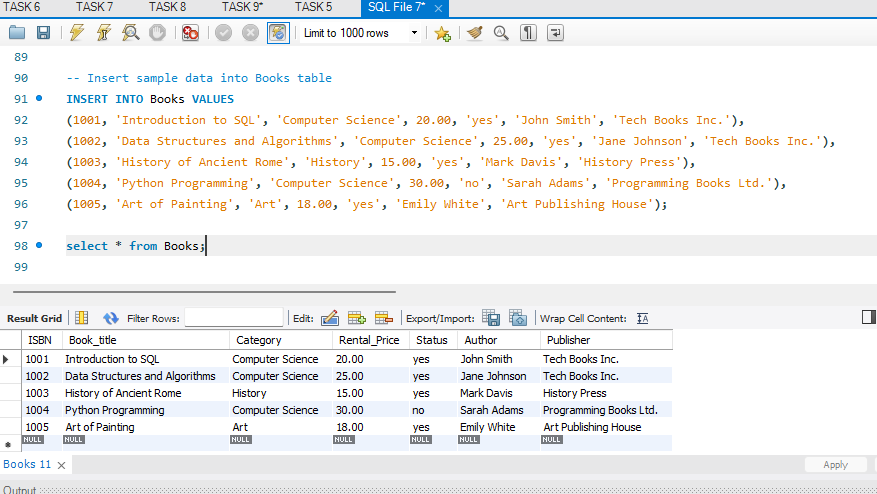
Category

Rental\_Price

Status [Give yes if book available and no if book not available]

Author

Publisher



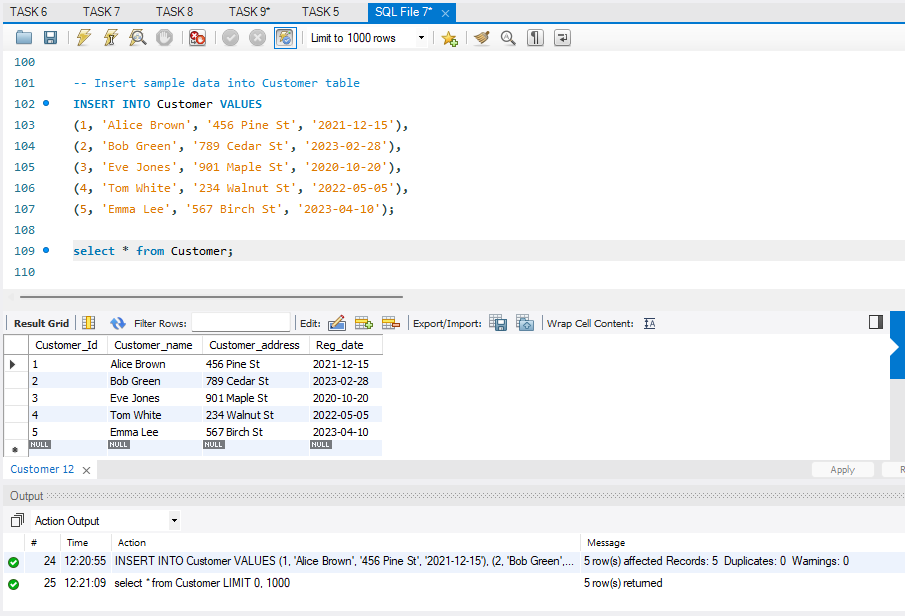
4. Customer

Customer\_Id - Set as PRIMARY KEY

Customer\_name

Customer\_address

Reg\_date



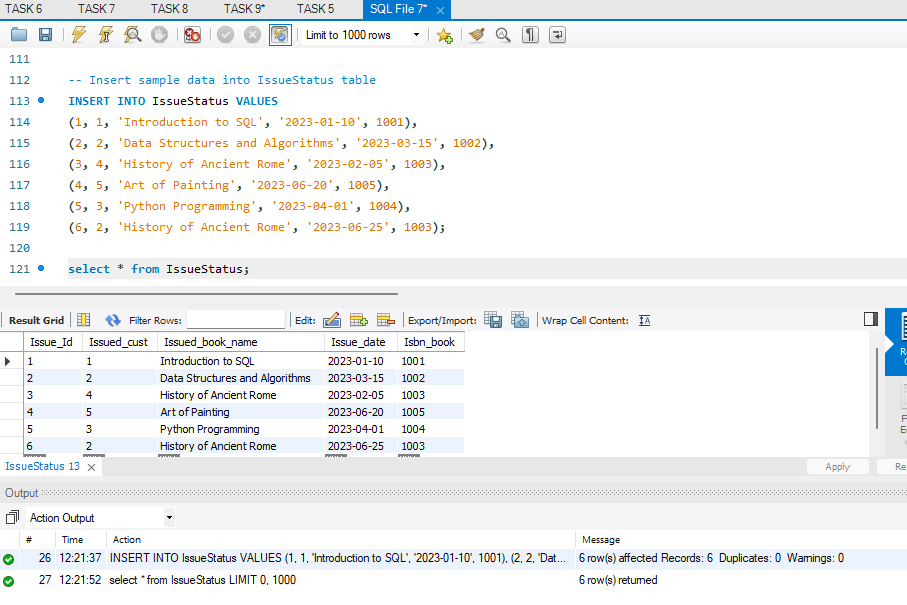
5. IssueStatus

Issue\_Id - Set as PRIMARY KEY

Issued\_cust – Set as FOREIGN KEY and it refer customer\_id in CUSTOMER table Issued\_book\_name

Issue\_date

Isbn\_book – Set as FOREIGN KEY and it should refer isbn in BOOKS table



6. ReturnStatus

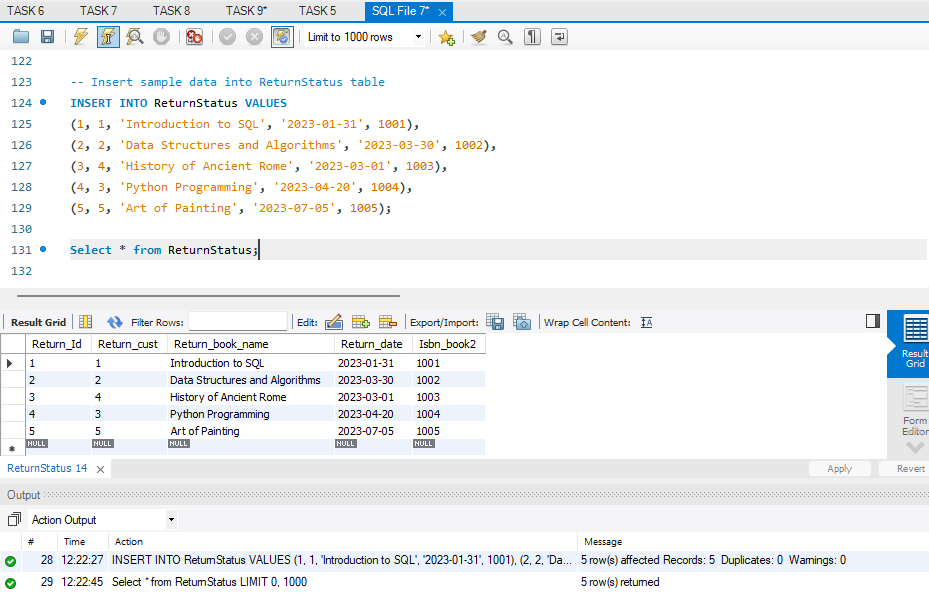
Return\_Id - Set as PRIMARY KEY

Return\_cust

Return\_book\_name

Return\_date

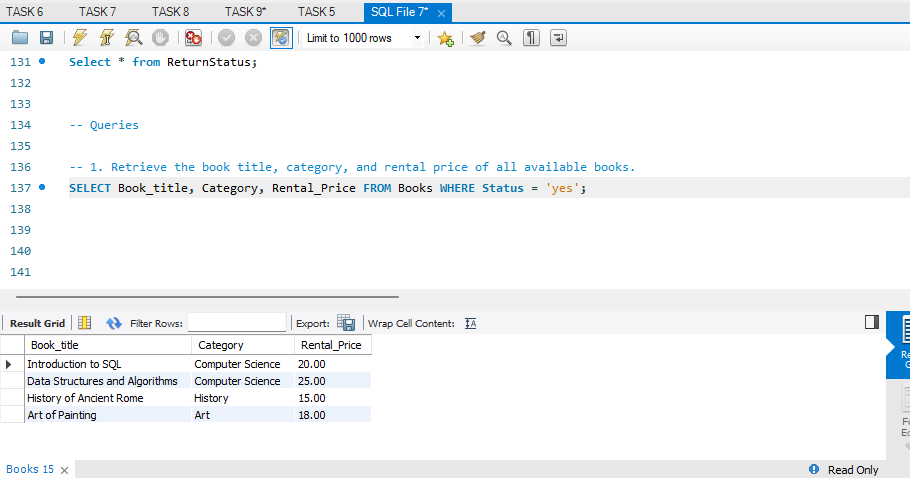
Isbn\_book2 - Set as FOREIGN KEY and it should refer isbn in BOOKS table



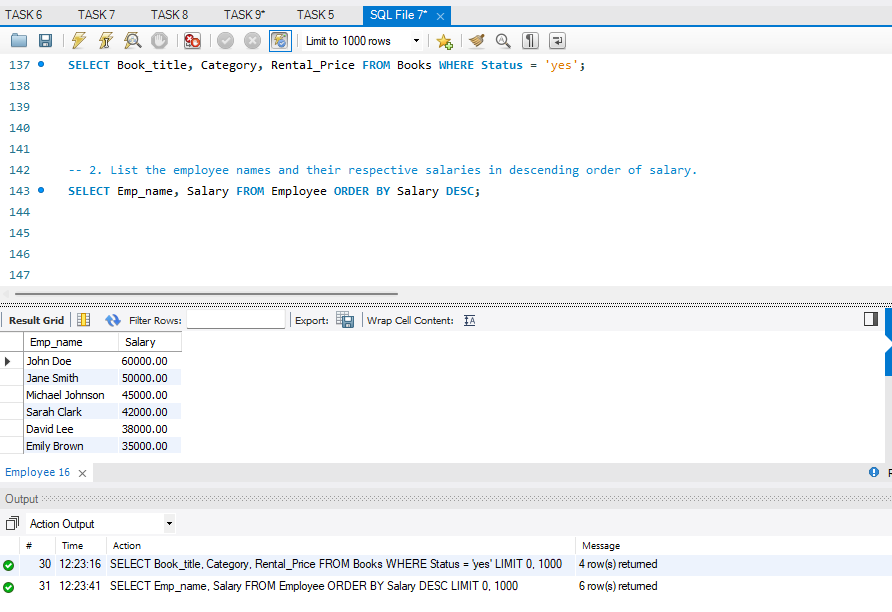
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Display all the tables and Write the queries for the following :

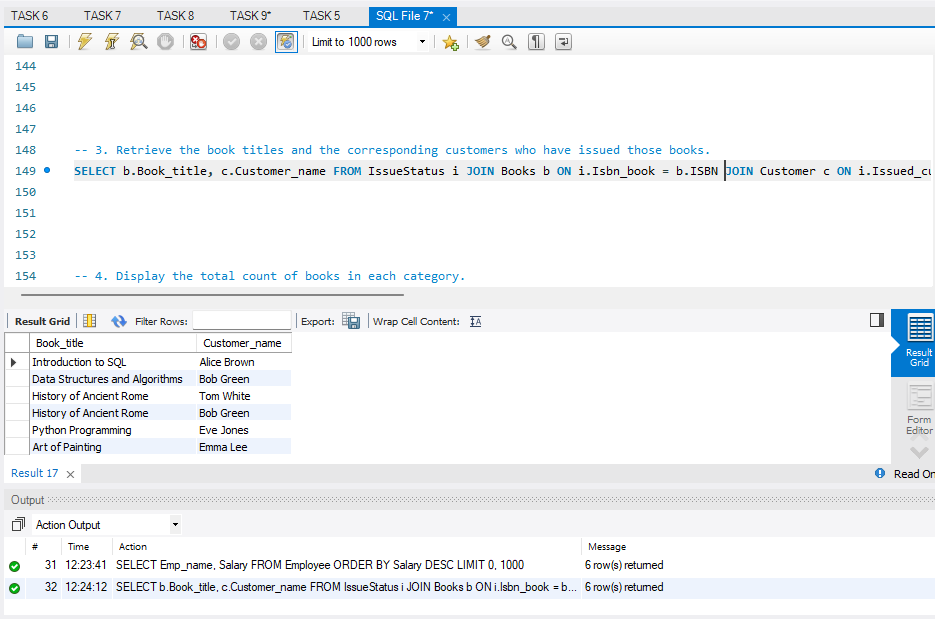
1. Retrieve the book title, category, and rental price of all available books



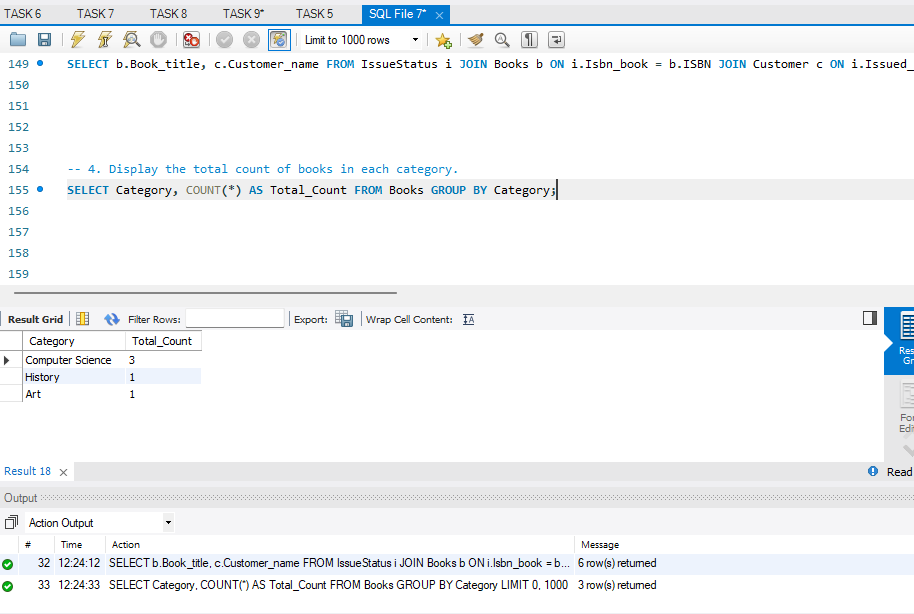
1. List the employee names and their respective salaries in descending order of salary.



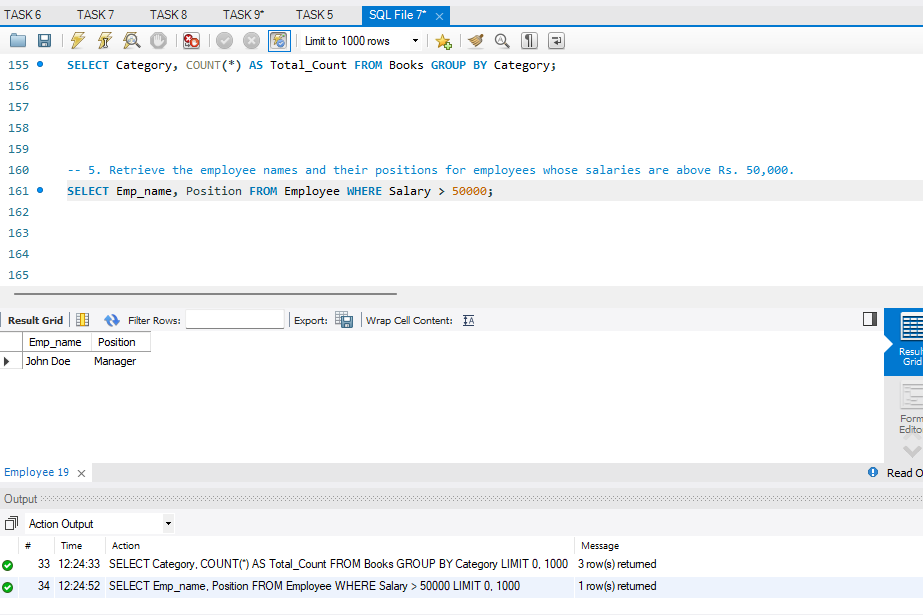
1. Retrieve the book titles and the corresponding customers who have issued those books.



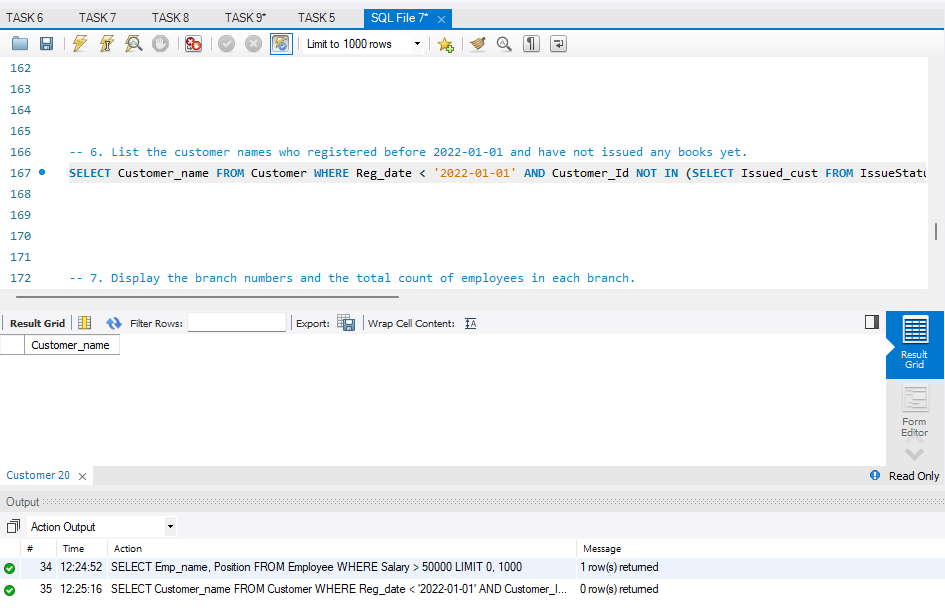
1. Display the total count of books in each category.



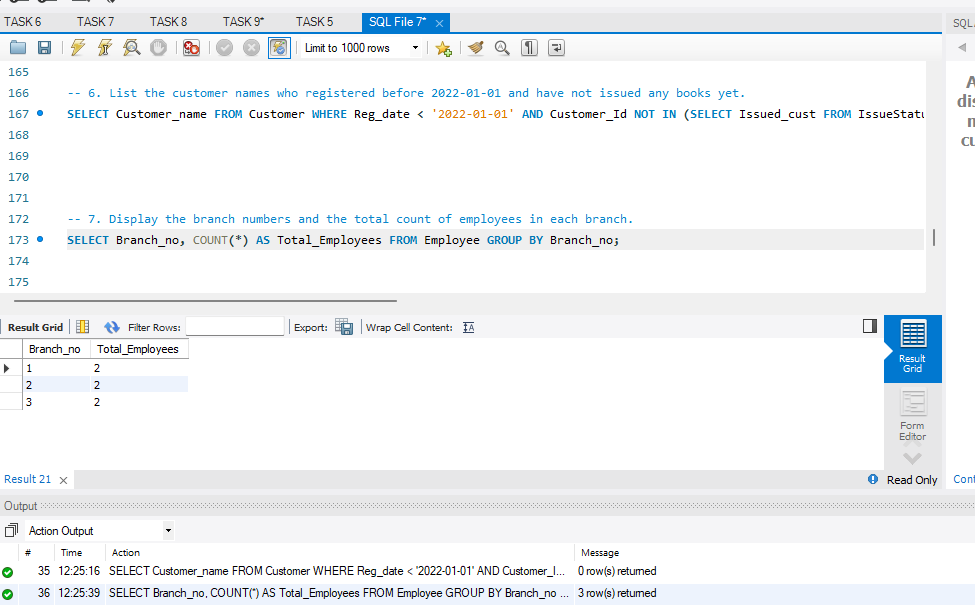
1. Retrieve the employee names and their positions for the employees whose salaries are above Rs.50,000.



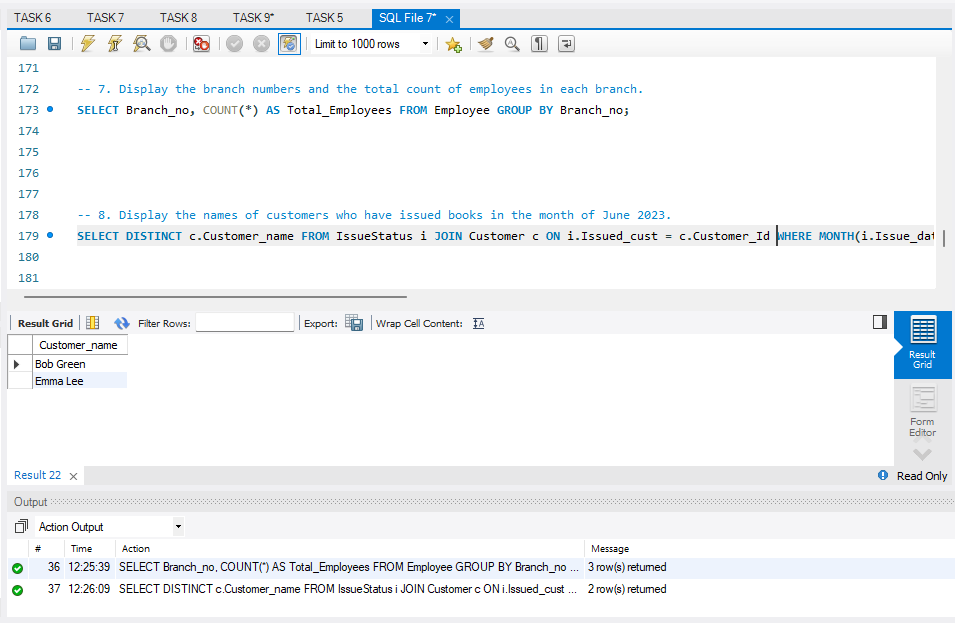
1. List the customer names who registered before 2022-01-01 and have not issued any books yet.



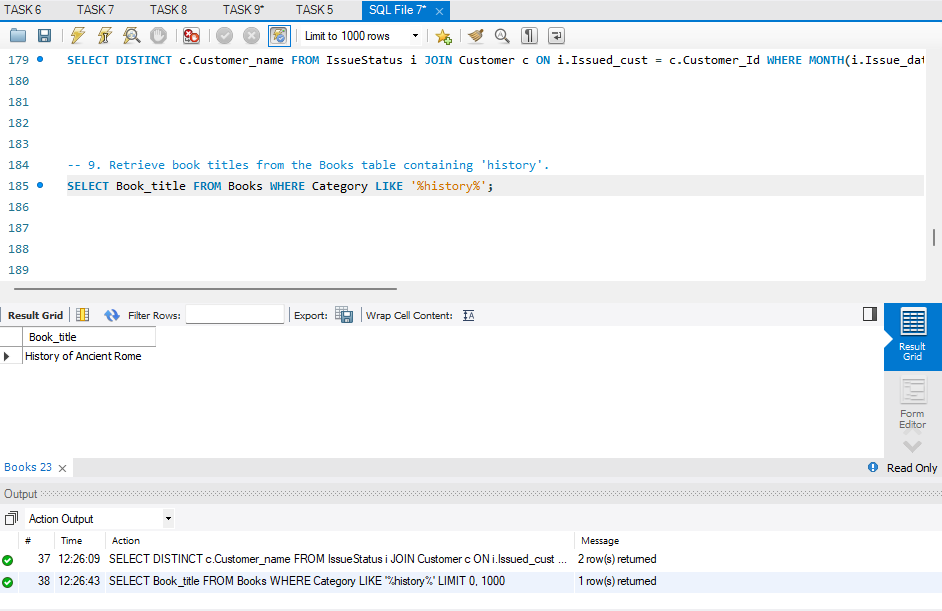
1. Display the branch numbers and the total count of employees in each branch.



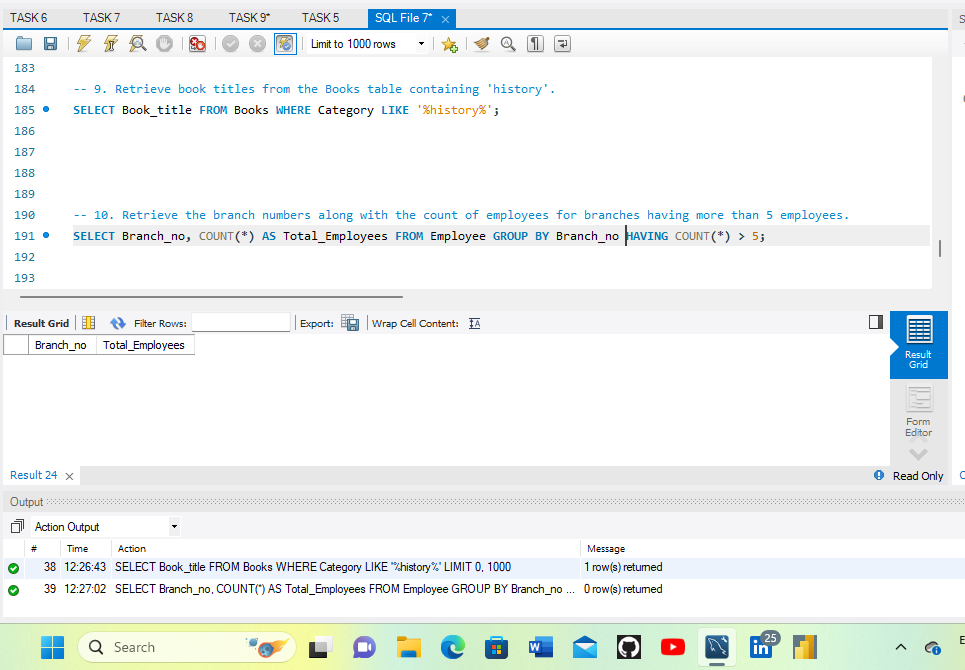
1. Display the names of customers who have issued books in the month of June 2023.



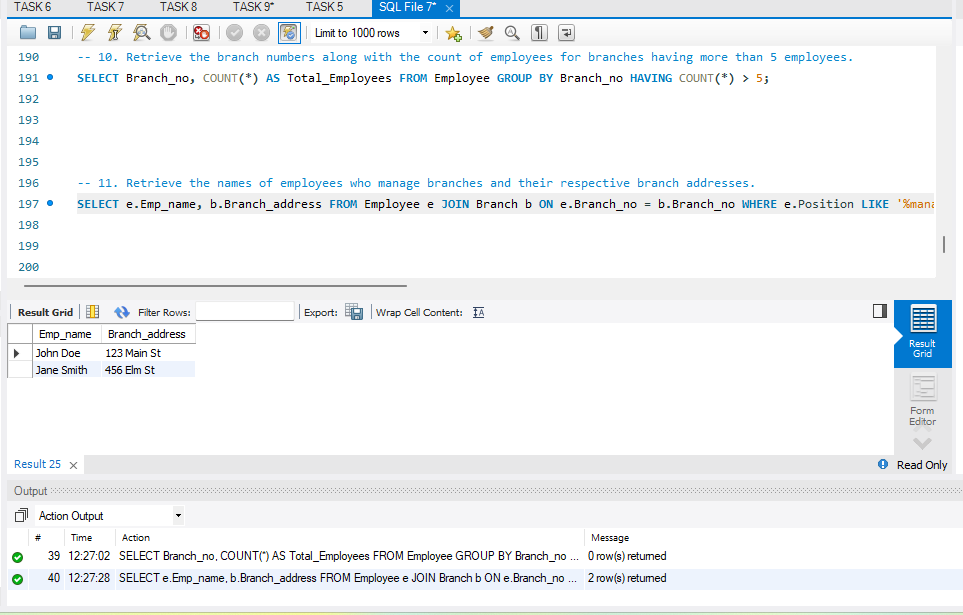
1. Retrieve book\_title from book table containing history.



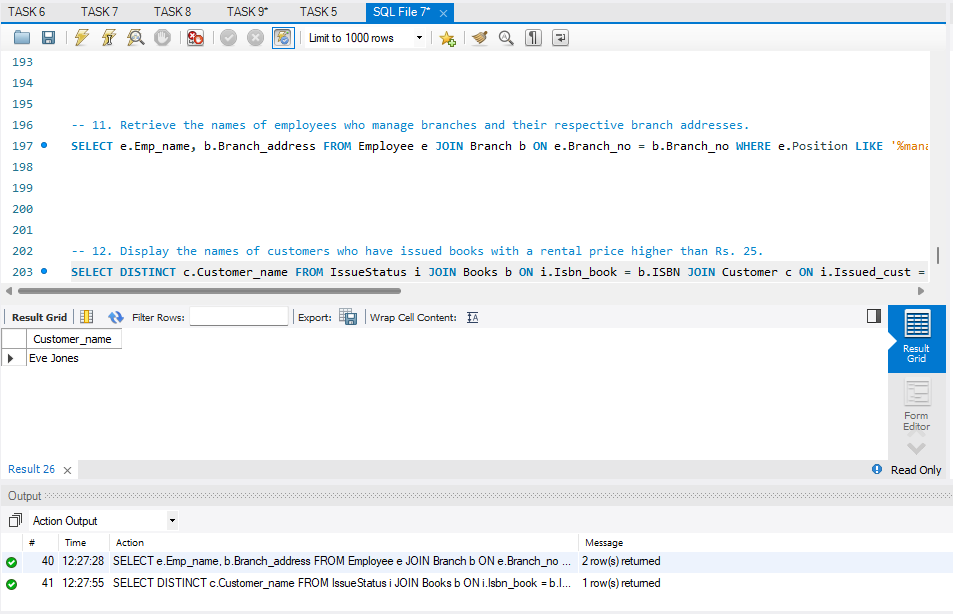
10.Retrieve the branch numbers along with the count of employees for branches having more than 5 employees



11.Retrieve the names of employees who manage branches and their respective branch addresses.



12. Display the names of customers who have issued books with a rental price higher than Rs. 25.



\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*