Table 1. Branch

Branch_no - Set as PRIMARY KEY Manager_Id Branch_address Contact_no

	Field		Type		Null	Key	Defa	ult
•	Branch_no		varchar(10)	NO	PRI	NULL	
	Manager_id		varchar(10)	YES		HULL	
	Branch_addre	SS	varchar(30)	YES		NULL	
	Contact_no		varchar(15)	YES		NULL	
	Branch_no	Ma	nager_id	В	ranch_a	ddress	Con	tact_r
•	B001	M1	01	12	3 Palakk	cad	+919	90999
	B002	M1	02	45	6 Erana	kulam	+919	90999
	B003	M1	03	78	9 Kotta	yam	+919	90999
	B004	M1	04	56	7 Calicu	t	+919	90999
	B005	M1	05	89	0 Trivan	drum	+919	90999

Table 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

	Field		Тур	e	Null	Key	
١	Emp_ID		vard	har(10)	NO	PRI	
	Emp_nam	e	vard	har(30)	YES		
	Emp_Posi	tion	vard	har(20)	YES		
	Salary		decir	nal(10,2)	YES		
	branch_n	umber	vard	har(10)	YES	MUL	
	Emp_ID	Emp_	name	Emp_Pos	sition	Salary	branch_number
١	E101	John		Manager		60000.00	B001
	E102	Anu		Clerk		45000.00	B003
	E103	James		Librarian		55000.00	B002
	E104	Eva		Assistant		40000.00	B001
	E105	Sarah		Assistant		42000.00	B004
	E106	Rakes	h	Assistant		43000.00	B005
	E107	Manu		Manager		62000.00	B002
	E108	Rahul		Clerk		46000.00	B001
	E109	Devika	1	Librarian		57000.00	B003
	E110	Nithya		Assistant		41000.00	B005
	E111	Divya		Manager		65000.00	B004
	E112	Jacob		clerk		30000.00	B001
	E113	Ram		Trainee		10000.00	B001
	E114	Raj		clerk		30000.00	B001
	NULL	NULL		HULL		NULL	NULL

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

	Field	Type	Null	Key
١	ISBN	varchar(25)	NO	PRI
	Book_title	varchar(80)	YES	
	Category	varchar(30)	YES	
	Rental_Price	decimal(10,2)	YES	
	Status	enum('Yes','No')	YES	
	Author	varchar(30)	YES	
	Publisher	varchar(30)	YES	

	ISBN	Book_title	Category	Rental_Price	Status	Author	Publisher
•	978-0-09-957807-9	A Game of Thrones	Fantasy	7.50	Yes	George R.R. Martin	Bantam
	978-0-14-044930-3	The Histories	History	5.50	Yes	Herodotus	Penguin Classics
	978-0-14-118776-1	One Hundred Years of Solitude	Literary Fiction	6.50	Yes	Gabriel Garcia Marquez	Penguin Books
	978-0-141-44171-6	Jane Eyre	Classic	4.00	Yes	Charlotte Bronte	Penguin Classics
	978-0-19-280551-1	The Guns of August	History	7.00	No	Barbara W. Tuchman	Oxford University Press
	978-0-307-37840-1	The Alchemist	Fiction	2.50	Yes	Paulo Coelho	HarperOne
	978-0-307-58837-1	Sapiens: A Brief History of Humankind	History	8.00	Yes	Yuval Noah Harari	Harper Perennial
	978-0-330-25864-8	Animal Farm	Classic	5.50	Yes	George Orwell	Penguin Books
	978-0-375-41398-8	The Diary of a Young Girl	History	6.50	Yes	Anne Frank	Bantam
	978-0-393-05081-8	A People's History of the United States	History	9.00	Yes	Howard Zinn	Harper Perennial
	978-0-393-91257-8	Guns, Germs, and Steel: The Fates of	History	7.00	No	Jared Diamond	W. W. Norton & Comp
	978-0-525-47535-5	The Great Gatsby	Classic	8.00	No	F. Scott Fitzgerald	Scribner
	978-0-553-29698-2	The Catcher in the Rye	Classic	7.00	Yes	J.D. Salinger	Little, Brown and Comp
	978-0-679-76489-8	Harry Potter and the Sorcerer's Stone	Fantasy	7.00	Yes	J.K. Rowling	Scholastic
	978-0-7432-4722-4	The Da Vinci Code	Mystery	8.00	Yes	Dan Brown	Doubleday
	978-0-7432-7357-1	1491: New Revelations of the Americ	History	6.50	Yes	Charles C. Mann	Vintage Books

Table 4. Customer

Customer_Id - Set as PRIMARY KEY Customer_name Customer_address Reg_date

	Field	Type	Null	Key
١	Customer_Id	varchar(10)	NO	PRI
	Customer_name	varchar(30)	YES	
	Customer_address	varchar(30)	YES	
	Reg_date	date	YES	

	Customer_Id	Customer_name	Customer_address	Reg_date
•	C101	Alice	123 Palakkad	2023-05-15
	C102	Bob	456 Eranakulam	2022-06-20
	C103	Chandni	789 Kottayam	2024-07-10
	C104	Dev	567 Calicut	2024-08-05
	C105	Eve	890 Trivandrum	2023-09-25
	C106	Franklin	456 Eranakulam	2022-10-15
	C107	Grace	789 Kottayam	2021-11-20
	C108	Henry	567 Calicut	2023-12-10
	C109	shani	123 Palakkad	2022-01-05
	C110	Jack	890 Trivandrum	2024-02-25

Table 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

	Field	Туре	Null	Key
•	Issue_Id	varchar(10)	NO	PRI
	Issued_cust	varchar(30)	YES	MUL
	Issued_book_name	varchar(80)	YES	
	Issue_date	date	YES	
	Isbn_book	varchar(25)	YES	MUL

	Issue_Id	Issued_cust	Issued_book_name	Issue_date	Isbn_book
•	IS101	C101	The Catcher in the Rye	2023-05-01	978-0-553-29698-2
	IS102	C102	The Da Vinci Code	2023-05-02	978-0-7432-4722-4
	IS103	C103	1491: New Revelations of the Americas Before	2023-05-03	978-0-7432-7357-1
	IS104	C104	Sapiens: A Brief History of Humankind	2023-05-04	978-0-307-58837-1
	IS105	C105	The Diary of a Young Girl	2023-05-05	978-0-375-41398-8
	IS106	C106	The Histories	2023-06-01	978-0-14-044930-3

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

	Field	Type	Null	Key
١	Return_id	varchar(10)	NO	PRI
	Return_cust	varchar(30)	YES	
	Return_book_name	varchar(80)	YES	
	Return_date	date	YES	
	isbn_book2	varchar(25)	YES	MUL

	Return_id	Return_cust	Return_book_name	Return_date	isbn_book2
•	RS101	C101	The Catcher in the Rye	2023-06-06	978-0-553-29698-2
	RS102	C102	The Da Vinci Code	2023-06-07	978-0-7432-4722-4
	RS103	C105	The Diary of a Young Girl	2023-06-08	978-0-375-41398-8
	RS104	C108	The Histories	2023-06-09	978-0-14-044930-3
	RS105	C110	A Game of Thrones	2023-06-10	978-0-09-957807-9

Queries

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
•	A Game of Thrones	Fantasy	7.50
	The Histories	History	5.50
	One Hundred Years of Solitude	Literary Fiction	6.50
	Jane Eyre	Classic	4.00
	The Alchemist	Fiction	2.50
	Sapiens: A Brief History of Humankind	History	8.00
	Animal Farm	Classic	5.50
	The Diary of a Young Girl	History	6.50
	A People's History of the United States	History	9.00
	The Catcher in the Rye	Classic	7.00
	Harry Potter and the Sorcerer's Stone	Fantasy	7.00
	The Da Vinci Code	Mystery	8.00
	1491: New Revelations of the Americ	History	6.50

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
•	Divya	65000.00
	Manu	62000.00
	John	60000.00
	Devika	57000.00
	James	55000.00
	Rahul	46000.00
	Anu	45000.00
	Rakesh	43000.00
	Sarah	42000.00
	Nithya	41000.00
	Eva	40000.00

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

SELECT

issuestatus.Issued_book_name, customer.Customer_name

FROM

issuestatus

INNER JOIN

customer ON issuestatus.Issued_cust = customer.Customer_Id;

	Issued_book_name	Customer_name
•	The Catcher in the Rye	Alice
	The Da Vinci Code	Bob
	1491: New Revelations of the Americas Before	Chandni
	Sapiens: A Brief History of Humankind	Dev
	The Diary of a Young Girl	Eve
	The Histories	Franklin

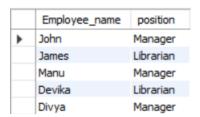
4. Display the total count of books in each category.

SELECT Category, COUNT(Book_title) as count FROM books GROUP BY Category;

	Category	count
•	Fantasy	2
	History	7
	Literary Fiction	1
	Classic	4
	Fiction	1
	Mystery	1

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

SELECT Emp_name as Employee_name, emp_position as position from employee where salary>50000;

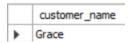


6. List the customer names who registered before 2022-01-01 and have not issued any books yet.

SELECT customer_name FROM customer

WHERE Reg_date < '2022-01-01' AND Customer_Id NOT IN

(SELECT issued_cust FROM issuestatus);



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

SELECT Branch_number, COUNT(emp_id) as Count

FROM employee GROUP BY branch_number;

	Branch_number	Count
•	B001	3
	B002	2
	B003	2
	B004	2
	B005	2

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

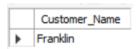
SELECT customer_name as Customer_Name FROM customer

INNER JOIN issuestatus ON

customer_Id = issuestatus.Issued_cust

WHERE issuestatus.Issue_date >= '2023-06-01'

AND issuestatus.Issue_date <= '2023-06-30';



9. Retrieve book_title from book table containing history.

SELECT Book_title FROM books

WHERE Category = 'history';



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

SELECT branch_number, COUNT(emp_id) as count

FROM employee

GROUP BY branch_number

HAVING COUNT(Emp_id) > 5;

	branch_number	count
•	B001	6

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_number = b.branch_no and emp_position = 'Manager';



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

Select C.Customer_Name, b.Rental_Price from customer c join issuestatus i

on $c.Customer_id = I.issued_cust$

join books b on I.isbn_book= b.isbn and b.rental_price>25;

	Customer_Name	Rental_Price
•	Chandni	30.00
	Dev	30.00