

## Commands:

- Create database:

### (SQL QUERIES)

- create database library\_info;
- use library\_info;
- create table named author :

```
CREATE TABLE author (  
    authorID INT,  
    fname VARCHAR(50),  
    lname VARCHAR(50),  
    PRIMARY KEY(authorID)  
);
```

```
desc author;
```

```
INSERT INTO author VALUES
```

```
(1, 'William Dean', 'Howells'),
```

```
(2, 'Frederic', 'Brown'),
```

```
(3, 'Jack', 'London'),
```

```
(4, 'Albert', 'Blaisdell'),
```

```
(5, 'Ellis', 'Butler'),
```

```
(6, 'Arthur', 'Machen'),
```

```
(7, 'Titus', 'Lucretius'),
```

```
(8, 'Rabindranath', 'Tagore'),
```

```
(9, 'Isaac', 'Asimov'),
```

```
(10, 'Charles', 'Dickens'),
```

```
(11, 'Ralph Waldo', 'Emerson'),
```

```
(12, 'Dorothy', 'Canfield'),
```

```
(13, 'Giovanni', 'Boccaccio'),
```

```
(14, 'George', 'Orwell'),
```

```
(15, 'Publius', 'Ovid'),
```

```
(16, 'Robert Louis', 'Stevenson'),
```

```
(17, 'Virginia', 'Woolf'),
```

```
(18, 'George', 'Eliot'),
```

(19, 'Amelia B.', 'Edwards'),  
 (20, 'Fyodor', 'Dostoevsky'),  
 (21, 'Emily', 'Dickinson'),  
 (22, 'Edna', 'Ferber'),  
 (23, 'Joseph Sheridan', 'LeFanu'),  
 (24, 'John', 'DosPassos'),  
 (25, 'Ruth', 'Stuart'),  
 (26, 'Vladimir', 'Nabokov'),  
 (27, 'Johanna', 'Spyri'),  
 (28, 'Ernest', 'Dowson'),  
 (29, 'Mary Hallock', 'Foote'),  
 (30, 'Zane', 'Grey'),  
 (31, 'H. P.', 'Lovecraft'),  
 (32, 'Samuel', 'Pepys'),  
 (33, 'Kate Dickinson', 'Sweetser'),  
 (34, 'William', 'Lampton'),  
 (35, 'Mother', 'Goose'),  
 (36, 'Eleanor Hallowell', 'Abbott');  
 select \* from author;

- CREATE TABLE NAMED TYPE:

```

CREATE TABLE type (
  typeID INT,
  type VARCHAR(50),
  PRIMARY KEY (typeID)
);

desc type;

INSERT into type VALUES
(1, 'Science fiction'),
(2, 'Satire'),
(3, 'Drama'),
(4, 'Action and Adventure'),
(5, 'Romance'),
(6, 'Mystery'),
(7, 'Horror'),

```

(8, 'Health'),  
(9, 'Guide'),  
(10, 'Diaries'),  
(11, 'Comics'),  
(12, 'Diaries'),  
(13, 'Journals'),  
(14, 'Biographies'),  
(15, 'Fantasy'),  
(16, 'History'),  
(17, 'Science'),  
(18, 'Art');

- Create table named customer:

```
CREATE TABLE customer (  
  custID INT,  
  fname VARCHAR(30),  
  lname VARCHAR(30),  
  gender varchar(30),  
  age int,  
  sub_start_date DATE,  
  sub_end_date DATE,  
  PRIMARY KEY (custID)  
);
```

desc customer;

INSERT INTO customer VALUES

(1, 'Hazel', 'Green', 'F', 28, '2020-05-15', '2023-05-15'),  
(2, 'Ashley', 'Marshall', 'F', 20, '2020-10-28', '2023-10-28'),  
(3, 'Ansley', 'Green', 'F', 22, '2021-07-12', '2024-07-12'),  
(4, 'Alcock', 'Chapman', 'F', 22, '2020-01-25', '2023-01-25'),  
(5, 'Meadow', 'Taylor', 'F', 23, '2020-12-30', '2023-12-30'),  
(6, 'Green', 'Wright', 'M', 32, '2020-03-09', '2023-03-09'),  
(7, 'Paxton', 'Foster', 'M', 34, '2020-03-03', '2023-03-03'),  
(8, 'Gray', 'King', 'M', 62, '2020-06-26', '2023-06-26'),  
(9, 'Jones', 'Collins', 'M', 25, '2020-01-26', '2023-01-26'),  
(10, 'Leslie', 'Young', 'F', 42, '2020-02-10', '2023-02-10'),

(11, 'Hailey', 'Hill', 'F', 27, '2021-01-16', '2024-01-16'),  
(12, 'Washington', 'Martin', 'M', 24, '2021-05-23', '2024-05-23'),  
(13, 'Ramirez', 'Green', 'M', 33, '2020-08-28', '2023-08-28'),  
(14, 'Morgan', 'Smith', 'M', 29, '2021-05-15', '2024-05-15'),  
(15, 'Perez', 'Baker', 'M', 53, '2020-10-27', '2023-10-27'),  
(16, 'Alfie', 'Watson', 'M', 26, '2021-04-05', '2024-04-05'),  
(17, 'Madison', 'Jackson', 'F', 35, '2021-02-15', '2024-02-15'),  
(18, 'Beverly', 'Moore', 'F', 22, '2020-11-19', '2023-11-19'),  
(19, 'Kaden', 'Anderson', 'M', 26, '2021-11-11', '2024-11-11'),  
(20, 'Carter', 'Adams', 'M', 27, '2021-07-08', '2024-07-08'),  
(21, 'Ackland', 'Adams', 'F', 28, '2021-05-19', '2024-05-19'),  
(22, 'Hadley', 'Parker', 'F', 37, '2020-11-21', '2023-11-21'),  
(23, 'Henderson', 'Cook', 'M', 38, '2021-08-06', '2024-08-06'),  
(24, 'Wright', 'Young', 'M', 35, '2021-05-14', '2024-05-14'),  
(25, 'Lindsey', 'Wilkinson', 'F', 28, '2021-10-08', '2024-10-08'),  
(26, 'Wren', 'Chapman', 'F', 25, '2021-11-06', '2024-11-06'),  
(27, 'Love', 'Chapman', 'F', 19, '2021-10-15', '2024-10-15'),  
(28, 'Wes', 'Bell', 'M', 23, '2021-01-25', '2024-01-25'),  
(29, 'Tyler', 'Carter', 'M', 27, '2021-08-24', '2024-08-24'),  
(30, 'Edwin', 'Cook', 'M', 39, '2021-08-17', '2024-08-17'),  
(31, 'Sally', 'Wood', 'F', 45, '2020-06-07', '2023-06-07'),  
(32, 'Nelson', 'Smith', 'M', 27, '2020-11-15', '2023-11-15'),  
(33, 'Arabelle', 'Brown', 'F', 52, '2021-03-11', '2024-03-11'),  
(34, 'Carter', 'Harrison', 'M', 21, '2021-11-30', '2024-11-30'),  
(35, 'Baker', 'Bell', 'M', 20, '2021-03-24', '2024-03-24'),  
(36, 'Cherish', 'Cooper', 'F', 34, '2020-01-31', '2023-01-31'),  
(37, 'Remington', 'Wright', 'M', 29, '2020-08-14', '2023-08-14'),  
(38, 'Edwards', 'King', 'M', 24, '2020-02-01', '2023-02-01'),  
(39, 'Harleigh', 'Taylor', 'F', 26, '2020-05-05', '2023-05-05'),  
(40, 'Ryleigh', 'Clark', 'F', 45, '2020-10-29', '2023-10-29'),  
(41, 'Albert', 'Richardson', 'F', 57, '2021-03-19', '2024-03-19'),  
(42, 'Lee', 'Ward', 'M', 36, '2020-05-13', '2023-05-13'),  
(43, 'Kaylin', 'Bell', 'F', 28, '2020-09-12', '2023-09-12'),  
(44, 'Agard', 'Young', 'F', 23, '2021-04-03', '2024-04-03'),  
(45, 'Turner', 'Hall', 'M', 24, '2021-01-07', '2024-01-07'),

(46, 'Akes', 'White', 'F', 20, '2021-03-08', '2024-03-08'),  
(47, 'Lewis', 'Lee', 'M', 35, '2021-01-30', '2024-01-30'),  
(48, 'Karson', 'Cook', 'M', 30, '2021-06-26', '2024-06-26'),  
(49, 'Hayden', 'Young', 'M', 31, '2020-12-15', '2023-12-15'),  
(50, 'Sterling', 'Shaw', 'M', 26, '2021-06-24', '2024-06-24');

- Create table named book

```
CREATE TABLE book (  
  bkID INT,  
  title VARCHAR(50),  
  pageCount INT,  
  authorID INT,  
  typeId INT,  
  PRIMARY KEY (bkID),  
  CONSTRAINT fk_bk_author FOREIGN KEY (authorID) REFERENCES  
    author(authorID),  
  CONSTRAINT fk_bk_type FOREIGN KEY (typeID) REFERENCES  
    type(typeID)  
);  
  
desc book;  
  
INSERT INTO book VALUES  
(1, 'A Daughter of the Snows', 199, 3, 9),  
(2, 'The Near East: 10,000 Years of History', 298, 9, 13),  
(3, 'The Cocoon:A Rest-Cure Comedy', 90, 25, 12),  
(4, 'The Freakshow Murders', 321, 2, 3),  
(5, 'Pharaohs, Fellahs and Explorers', 367, 19, 9),  
(6, 'Hard Times', 293, 10, 1),  
(7, 'A Modern Instance', 222, 1, 12),  
(8, 'The Real Mother Goose', 88, 35, 1),  
(9, 'A Thousand Miles Up the Nile', 110, 19, 18),  
(10, 'Children of Blood and Bone', 137, 7, 13),  
(11, 'A pushcart at the curb', 95, 24, 1),  
(12, 'The Desert and the Sown', 126, 29, 10),  
(13, 'Three Soldiers', 223, 24, 16),  
(14, 'The End of Eternity', 168, 9, 1),
```

- (15, 'Annie Kilburn', 291, 1, 12),
- (16, 'A Touch of Sun and Other Stories', 141, 29, 9),
- (17, 'Show Boat', 151, 22, 18),
- (18, 'The Call of the Wild', 362, 3, 18),
- (19, 'My Mark Twain', 339, 1, 9),
- (20, 'Broken Ties', 134, 8, 5),
- (21, 'Short Stories From American History', 305, 4, 8),
- (22, 'Mrs Rosie and the Priest', 104, 13, 14),
- (23, 'So Big', 209, 22, 3),
- (24, 'Monsieur Maurice ', 92, 19, 8),
- (25, 'The Master of Ballantrae', 236, 16, 13),
- (26, 'The Unlived Life of Little Mary Ellen', 99, 25, 6),
- (27, 'Mouse - The Last Train', 184, 2, 14),
- (28, 'Edith Bonham', 122, 29, 7),
- (29, 'Maybe Mother Goose', 161, 35, 14),
- (30, 'The Noble Gases', 321, 9, 5),
- (31, 'Rainy Week', 98, 36, 7),
- (32, 'A Hazard of New Fortunes', 144, 1, 4),
- (33, 'A Plot for Murder', 108, 2, 13),
- (34, 'Nature', 357, 11, 8),
- (35, 'Hickory Dickory Dock', 326, 35, 6),
- (36, 'Big Fat Hen', 232, 35, 12),
- (37, 'The Lone Star Ranger', 328, 30, 9),
- (38, 'The Great Fire of London', 252, 32, 9),
- (39, 'White Nights', 265, 20, 14),
- (40, 'In a Glass Darkly', 173, 23, 9),
- (41, 'Fanny herself', 248, 22, 10),
- (42, 'Loaded', 273, 2, 4),
- (43, 'A Foregone Conclusion', 121, 1, 15),
- (44, 'The Hill of Dreams', 175, 6, 6),
- (45, 'Adventure', 217, 3, 8),
- (46, 'A Tagore Reader', 285, 8, 4),
- (47, 'A Tale of Two Cities', 331, 10, 13),
- (48, 'Dombey and Son', 344, 10, 14),
- (49, 'Famous Women', 273, 13, 1),

(50, 'Rejection, The Ruling Spirit', 358, 5, 2);

select \* from book;

- Create table named transaction

```
CREATE TABLE transaction (  
transID INT,  
custID INT,  
bkID INT,  
issue_date DATETIME,  
return_date DATETIME,  
PRIMARY KEY (transID),  
CONSTRAINT fk_trans_cust FOREIGN KEY (custID) REFERENCES  
customer(custID),  
CONSTRAINT fk_trans_bk FOREIGN KEY (bkID) REFERENCES  
book(bkID)
```

);

desc transaction;

INSERT INTO transaction VALUES

```
(1, 37, 24, '2021-08-31 04:30:00', '2021-09-17 00:15:00'),  
(2, 32, 17, '2021-10-01 14:28:00', '2021-10-07 11:22:00'),  
(3, 40, 29, '2021-10-02 10:45:00', '2021-10-10 17:16:00'),  
(4, 36, 44, '2021-10-03 15:57:00', '2021-10-09 10:43:00'),  
(5, 11, 16, '2021-10-07 13:19:00', '2021-10-15 18:55:00'),  
(6, 29, 34, '2021-10-09 08:32:00', '2021-10-14 08:17:00'),  
(7, 23, 26, '2021-10-09 15:48:00', '2021-10-21 10:51:00'),  
(8, 3, 34, '2021-10-10 19:55:00', '2021-10-15 09:20:00'),  
(9, 37, 50, '2021-10-14 10:25:00', '2021-10-14 12:52:00'),  
(10, 36, 39, '2021-10-16 08:53:00', '2021-10-29 18:47:00'),  
(11, 47, 14, '2021-10-24 10:50:00', '2021-11-05 18:19:00'),  
(12, 32, 30, '2021-10-24 13:48:00', '2021-10-28 19:33:00'),  
(13, 7, 33, '2021-10-27 08:10:00', '2021-11-10 14:34:00'),  
(14, 32, 12, '2021-10-27 09:27:00', '2021-11-13 18:23:00'),  
(15, 44, 19, '2021-10-29 14:39:00', '2021-11-07 18:34:00'),  
(16, 11, 1, '2021-11-03 15:11:00', '2021-11-04 19:42:00'),  
(17, 15, 3, '2021-11-06 11:51:00', '2021-11-12 11:49:00'),
```

(18, 4, 36, '2021-11-06 16:24:00', '2021-11-11 14:00:00'),  
(19, 8, 44, '2021-11-12 14:02:00', '2021-11-13 15:21:00'),  
(20, 33, 21, '2021-11-14 20:35:00', '2021-11-30 07:56:00'),  
(21, 23, 18, '2021-11-16 07:40:00', '2021-11-24 11:57:00'),  
(22, 13, 29, '2021-11-17 18:29:00', '2021-11-18 11:27:00'),  
(23, 42, 31, '2021-11-19 18:54:00', '2021-12-05 14:59:00'),  
(24, 11, 48, '2021-11-20 17:26:00', '2021-11-26 08:16:00'),  
(25, 29, 42, '2021-11-23 12:20:00', '2021-11-24 10:13:00'),  
(26, 37, 48, '2021-11-24 12:45:00', '2021-11-27 10:13:00'),  
(27, 7, 20, '2021-11-26 19:55:00', '2021-12-03 15:55:00'),  
(28, 39, 31, '2021-12-02 12:51:00', '2021-12-17 08:13:00'),  
(29, 49, 17, '2021-12-14 10:11:00', '2021-12-21 09:41:00'),  
(30, 37, 3, '2021-12-14 12:11:00', '2021-12-14 12:13:00'),  
(31, 1, 49, '2021-12-15 15:21:00', '2021-12-17 09:45:00'),  
(32, 49, 10, '2021-12-16 11:16:00', '2022-01-02 13:42:00'),  
(33, 34, 26, '2021-12-19 17:38:00', '2021-12-30 09:59:00'),  
(34, 21, 28, '2021-12-21 11:05:00', '2022-01-06 17:13:00'),  
(35, 31, 14, '2021-12-22 09:48:00', '2022-01-06 16:37:00'),  
(36, 10, 20, '2021-12-22 14:12:00', '2021-12-22 16:44:00'),  
(37, 25, 50, '2021-12-22 15:27:00', '2021-12-29 08:56:00'),  
(38, 25, 32, '2021-12-22 19:01:00', '2022-01-04 11:16:00'),  
(39, 11, 24, '2021-12-26 19:09:00', '2022-01-11 19:14:00'),  
(40, 45, 31, '2021-12-28 19:35:00', '2022-01-07 09:41:00'),  
(41, 36, 17, '2022-01-05 12:30:00', '2022-01-08 17:51:00'),  
(42, 21, 16, '2022-01-07 12:04:00', '2022-01-12 16:31:00'),  
(43, 27, 47, '2022-01-11 16:47:00', '2022-01-11 17:20:00'),  
(44, 1, 23, '2022-01-12 08:13:00', '2022-01-22 13:34:00'),  
(45, 11, 1, '2022-01-14 10:22:00', '2022-01-26 13:43:00'),  
(46, 5, 20, '2022-01-14 13:19:00', '2022-01-22 10:37:00'),  
(47, 22, 14, '2022-01-16 18:40:00', '2022-02-02 12:10:00'),  
(48, 14, 14, '2022-01-19 13:28:00', '2022-01-23 19:36:00'),  
(49, 45, 9, '2022-01-27 12:06:00', '2022-02-02 15:06:00'),  
(50, 20, 13, '2022-01-27 13:47:00', '2022-02-10 11:31:00'),  
(51, 24, 18, '2022-01-29 15:54:00', '2022-02-02 08:59:00'),  
(52, 6, 4, '2022-01-30 15:25:00', '2022-02-04 09:19:00'),



```
(53, 39, 2, '2022-01-30 17:01:00', '2022-02-13 11:13:00'),
(54, 47, 26, '2022-02-02 11:02:00', '2022-02-12 11:36:00'),
(55, 39, 47, '2022-02-11 08:55:00', '2022-02-24 12:40:00'),
(56, 23, 35, '2022-02-12 17:59:00', '2022-02-24 08:56:00'),
(57, 35, 1, '2022-02-13 19:07:00', '2022-02-17 11:01:00'),
(58, 35, 1, '2022-02-16 07:08:00', '2022-02-17 11:14:00'),
(59, 50, 3, '2022-02-26 17:54:00', '2022-03-16 11:53:00'),
(60, 15, 12, '2022-02-27 15:38:00', '2022-03-11 14:44:00');
select * from transaction;
```


- **Sub-queries:**

Q 1. Select customers who have not borrowed any book from library  
query

```
select * from customer;
SELECT customer.custID,customer.fname
FROM Customer
LEFT JOIN transaction ON Customer.custID = transaction.custID
where transaction.transID is null;
```

**RESULT:**

custID	fname
2	Ashley
9	Jones
12	Washington
16	Alfie
17	Madison
18	Beverly
19	Kaden
26	Wren
28	Wes
30	Edwin
38	Edwards
41	Albert
43	Kaylin
46	Akes
48	Karson

Result Grid   Filter Rows:

	custID	fname
	28	Wes
	30	Edwin
	38	Edwards
	41	Albert
	43	Kaylin
	46	Akes
	48	Karson

Q 2. Select book with highest page count

```
SELECT * FROM book WHERE pageCount = (SELECT MAX(pageCount)
FROM book);
```

**RESULT:**

bkID	title	pageCount	authorID	typeID
5	Pharaohs, Fellahs and Explorers	367	19	9

Result Grid		Filter Rows:	Edit:	Export/Import:	Wrap Cell Content:
bkID	title	pageCount	authorID	typeID	
5	Pharaohs, Fellahs and Explorers	367	19	9	
NULL	NULL	NULL	NULL	NULL	

Q 3. Select customer who has borrowed some book for longest period

```
SELECT customer.custID, customer.fname,
MAX(DATEDIFF(transaction.return_date, transaction.issue_date)) AS
max_borrow_duration
FROM customer
JOIN transaction ON customer.custID = transaction.custID
WHERE transaction.return_date IS NOT NULL
GROUP BY customer.custID, customer.fname
ORDER BY max_borrow_duration DESC
LIMIT 1;
```

**RESULT:**

custID	fname	max_borrow_duration
50	Sterling	18

Result Grid			Filter Rows: <input type="text"/>	Export:	Wrap Cell Content:	Fetch rows:
	custID	fname	max_borrow_duration			
▶	50	Sterling	18			

Q 4. Display list of all books along with their author

```
select book.bkID , title,author.fname from book left join author on
author.authorID = book.authorID ;
```

### RESULT:

bkID	title	fname
1	A Daughter of the Snows	Jack
2	The Near East: 10,000 Years of History	Isaac
3	The Cocoon:A Rest-Cure Comedy	Ruth
4	The Freakshow Murders	Frederic
5	Pharaohs, Fellahs and Explorers	Amelia B.
6	Hard Times	Charles
7	A Modern Instance	William Dean
8	The Real Mother Goose	Mother
9	A Thousand Miles Up the Nile	Amelia B.
10	Children of Blood and Bone	Titus
11	A pushcart at the curb	John
12	The Desert and the Sown	Mary Hallock
13	Three Soldiers	John
14	The End of Eternity	Isaac
15	Annie Kilburn	William Dean
16	A Touch of Sun and Other Stories	Mary Hallock
17	Show Boat	Edna
18	The Call of the Wild	Jack
19	My Mark Twain	William Dean
20	Broken Ties	Rabindranath
21	Short Stories From American History	Albert
22	Mrs Rosie and the Priest	Givoanni
23	So Big	Edna
24	Monsieur Maurice	Amelia B.
25	The Master of Ballantrae	Robert Louis
26	The Unlived Life of Little Mary Ellen	Ruth
27	Mouse - The Last Train	Frederic
28	Edith Bonham	Mary Hallock
29	Maybe Mother Goose	Mother
30	The Noble Gases	Isaac
		Eleanor
31	Rainy Week	Hallowell

32	A Hazard of New Fortunes	William Dean
33	A Plot for Murder	Frederic
34	Nature	Ralph Waldo
35	Hickory Dickory Dock	Mother
36	Big Fat Hen	Mother
37	The Lone Star Ranger	Zane
38	The Great Fire of London	Samuel
39	White Nights	Fyodor
		Joseph
40	In a Glass Darkly	Sheridan
41	Fanny herself	Edna
42	Loaded	Frederic
43	A Foregone Conclusion	William Dean
44	The Hill of Dreams	Arthur
45	Adventure	Jack
46	A Tagore Reader	Rabindranath
47	A Tale of Two Cities	Charles
48	Dombey and Son	Charles
49	Famous Women	Givoanni
50	Rejection, The Ruling Spirit	Ellis

Result Grid			
Filter Rows:		Export:	Wrap Cell Content: <a href="#">IA</a>
bkID	title	fname	
1	A Daughter of the Snows	Jack	
2	The Near East: 10,000 Years of History	Isaac	
3	The Cocoon:A Rest-Cure Comedy	Ruth	
4	The Freakshow Murders	Frederic	
5	Pharaohs, Fellahs and Explorers	Amelia B.	
6	Hard Times	Charles	
7	A Modern Instance	William Dean	
8	The Real Mother Goose	Mother	
9	A Thousand Miles Up the Nile	Amelia B.	
10	Children of Blood and Bone	Titus	
11	A pushcart at the curb	John	
12	The Desert and the Sown	Mary Hallock	
13	Three Soldiers	John	
14	The End of Eternity	Isaac	
15	Annie Kilburn	William Dean	
16	A Touch of Sun and Other Stories	Mary Hallock	
17	Show Boat	Edna	
18	The Call of the Wild	Jack	
19	My Mark Twain	William Dean	
20	Broken Ties	Rabindranath	
21	Short Stories From American History	Albert	
22	Mrs Rosie and the Priest	Givoanni	
23	So Big	Edna	
24	Monsieur Maurice	Amelia B.	
25	The Master of Ballantrae	Robert Louis	
26	The United Life of Little Mary Ellen	Ruth	

Q 5.Display list of top 20 most borrowed book

```
SELECT book.bkID, title, COUNT(transaction.bkID) AS borrow_count
FROM Book
JOIN transaction ON book.bkID = transaction.bkID
GROUP BY book.bkID, title
ORDER BY borrow_count desc
LIMIT 20;
```

**RESULT:**

bkID	title	borrow_count
1	A Daughter of the Snows	4
14	The End of Eternity	4
20	Broken Ties	3
26	The Unlived Life of Little Mary Ellen	3
17	Show Boat	3
3	The Cocoon:A Rest-Cure Comedy	3
31	Rainy Week	3
29	Maybe Mother Goose	2
12	The Desert and the Sown	2
48	Dombey and Son	2
34	Nature	2
18	The Call of the Wild	2
47	A Tale of Two Cities	2
44	The Hill of Dreams	2
24	Monsieur Maurice	2
16	A Touch of Sun and Other Stories	2
50	Rejection, The Ruling Spirit	2
13	Three Soldiers	1
36	Big Fat Hen	1
49	Famous Women	1

Result Grid			
		Filter Rows:	Export:
	bkID	title	borrow_count
▶	1	A Daughter of the Snows	4
	14	The End of Eternity	4
	20	Broken Ties	3
	26	The Unlived Life of Little Mary Ellen	3
	17	Show Boat	3
	3	The Cocoon:A Rest-Cure Comedy	3
	31	Rainy Week	3
	29	Maybe Mother Goose	2
	12	The Desert and the Sown	2
	48	Dombey and Son	2
	34	Nature	2
	18	The Call of the Wild	2
	47	A Tale of Two Cities	2
	44	The Hill of Dreams	2
	24	Monsieur Maurice	2
	16	A Touch of Sun and Other Stories	2
	50	Rejection, The Ruling Spirit	2
	13	Three Soldiers	1
	36	Big Fat Hen	1
	49	Famous Women	1

Q 6. Display list of top 10 customers who have borrowed most book

```



SELECT customer.custID, customer.fname, COUNT(transaction.bkID)
AS
books_borrowed
FROM customer
JOIN transaction ON customer.custID = transaction.custID
GROUP BY customer.custID, customer.fname
ORDER BY books_borrowed DESC
LIMIT 10;

```

### RESULT:

custID	fname	books_borrowed
11	Hailey	5
37	Remington	4
39	Harleigh	3
23	Henderson	3
32	Nelson	3
36	Cherish	3
1	Hazel	2
21	Ackland	2

47	Lewis	2
45	Turner	2

Result Grid   Filter Rows: <input type="text"/>			
	custID	fname	books_borrowed
▶	11	Hailey	5
	37	Remington	4
	39	Harleigh	3
	23	Henderson	3
	32	Nelson	3
	36	Cherish	3
	1	Hazel	2
	21	Ackland	2
	47	Lewis	2
	45	Turner	2

Result 10 