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CSE 4701 Project 1 Part 1

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Due: 9/27/2023

BOOK_LOAN_DB

Tables:

PUBLISHER

SELECT * FROM PUBLISHER;			SELECT * FROM BOOK;	SELECT *
Publisher_name	Address	Phone		
<input type="text" value="abc"/> Filter...	<input type="text" value="abc"/> Filter...	<input type="text" value="abc"/> Filter...		
Picador	4300 Turkey Pen Road	(233) 444-5521		
Simon & Schuster	4096 Emerson Road	(421) 540-1675		
Tom Doherty Assoc Llc	4321 Walnut Hill Drive	(345) 623-0356		

BOOK

SELECT * FROM PUBLISHER;		SELECT * FROM BOOK;	SELECT * FROM
Book_id	Title	Publisher_name	
<input type="text" value="abc"/> Filter...	<input type="text" value="abc"/> Filter...	<input type="text" value="abc"/> Filter...	
B1	The Lost Tribe	Picador	
B2	It	Simon & Schuster	
B3	Event Horizon	Tom Doherty Assoc Llc	

LIBRARY_BRANCH

SELECT * FROM LIBRARY_BRANCH;			SELECT * FROM BORROWER;	SELECT * FROM BOOK_LOANS;
Branch_id	Branch_name	Address		
abc Filter...	abc Filter...	abc Filter...		
BR1	Sharpstown	9 Bow Ridge Street Sharpstown		
BR2	Beloit	3 West Rd. Beloit		
BR3	Drive Lake Charles	824 Rock Maple Drive Lake Charles		

BOOK_COPIES

SELECT * FROM PUBLISHER;		SELECT * FROM BOOK;	SELECT * FROM BOOK_AUTHORS;	SELECT * FROM BOOK_COPIES;
Book_id	Branch_id	No_of_copies		
abc Filter...	abc Filter...	abc Filter...		
B1	BR1	15		
B2	BR2	10		
B3	BR3	20		

BORROWER

SELECT * FROM LIBRARY_BRANCH;		SELECT * FROM BORROWER;	SELECT * FROM BOOK_LOANS;
Card_no	Borrower_name	Address	Phone
abc Filter...	abc Filter...	abc Filter...	abc Filter...
C1	John Smith	731 Fondren, Houston, TX	(206) 342-8631
C2	Franklin Wong	638 Voss, Houston, TX	(717) 550-1675
C3	Alicia Zelaya	3321 Castle, Spring, TX	(248) 762-0356

BOOK_LOANS

SELECT * FROM LIBRARY_BRANCH;		SELECT * FROM BORROWER;	SELECT * FROM BOOK_LOANS;	
Book_id	Branch_id	Card_no	Date_out	Due_date
<input type="text" value="a c"/> Filter...	<input type="text" value="a c"/> Filter...	<input type="text" value="a c"/> Filter...	<input type="text" value="a c"/> Filter...	<input type="text" value="a c"/> Filter...
B1	BR1	C1	2023-01-05	2023-02-05
B2	BR2	C2	2022-12-06	2023-01-06
B3	BR3	C2	2023-01-29	2023-02-29

Code Snippets:

```
Project1.session.sql
1 CREATE TABLE BOOK (
2     Book_id varchar(255),
3     Title varchar(255),
4     Publisher_name varchar(255),
5     FOREIGN KEY (Publisher_name) REFERENCES PUBLISHER(Publisher_name)
6 );
7
8 CREATE TABLE PUBLISHER (
9     Publisher_name varchar(255),
10    Address varchar(255),
11    Phone varchar(15)
12 );
13
14 CREATE TABLE BOOK_LOANS (
15     Book_id varchar(255),
16     Branch_id varchar(255),
17     Card_no varchar(255),
18     Date_out varchar(255),
19     Due_date varchar(255)
20     PRIMARY KEY (Book_id, Branch_id, Card_no),
21     FOREIGN KEY (Book_id) REFERENCES BOOK(Book_id),
22     FOREIGN KEY (Branch_id) REFERENCES LIBRARY_BRANCH(Branch_id),
23     FOREIGN KEY (Card_no) REFERENCES BORROWER(Card_no)
24 );
25
26 CREATE TABLE LIBRARY_BRANCH (
27     Branch_id varchar(255),
28     Branch_name varchar(255),
29     Address varchar(255)
30 );
31
32 CREATE TABLE BOOK_AUTHORS (
33     Book_id varchar(255),
34     Author_name varchar(255),
35     PRIMARY KEY (Book_id, Author_name)
36 );
37
```

```

38 CREATE TABLE BOOK_COPIES (
39     Book_id varchar(255),
40     Branch_id varchar(255),
41     No_of_copies int,
42     PRIMARY KEY (Book_id, Branch_id),
43     FOREIGN KEY (Book_id) REFERENCES BOOK(Book_id),
44     FOREIGN KEY (Branch_id) REFERENCES LIBRARY_BRANCH(Branch_id)
45 );
46
47 CREATE TABLE BORROWER (
48     Card_no varchar(255),
49     Borrower_name varchar(255),
50     Address varchar(255),
51     Phone varchar(15) -- Assuming phone numbers as strings with a maximum length of 15 characters
52 );
53
54 INSERT INTO PUBLISHER (Publisher_name, Address, Phone)
55 VALUES
56     ('Picador', '4300 Turkey Pen Road', '(233) 444-5521'),
57     ('Simon & Schuster', '4096 Emerson Road', '(421) 540-1675'),
58     ('Tom Doherty Assoc Llc', '4321 Walnut Hill Drive', '(345) 623-0356');
59
60
61 INSERT INTO BOOK (Book_id, Title, Publisher_name)
62 VALUES
63     ('B1', 'The Lost Tribe', 'Picador'),
64     ('B2', 'It', 'Simon & Schuster'),
65     ('B3', 'Event Horizon', 'Tom Doherty Assoc Llc');
66
67 INSERT INTO BOOK_AUTHORS (Book_id, Author_name)
68 VALUES
69     ('B1', 'Mark Lee'),
70     ('B2', 'Stephen King'),
71     ('B3', 'Steven McDonald');
72

```

```

73
74 INSERT INTO BOOK_COPIES (Book_id, Branch_id, No_of_copies)
75 VALUES
76     ('B1', 'BR1', 15),
77     ('B2', 'BR2', 10),
78     ('B3', 'BR3', 20);
79
80
81 INSERT INTO LIBRARY_BRANCH (Branch_id, Branch_name, Address)
82 VALUES
83     ('BR1', 'Sharpstown', '9 Bow Ridge Street Sharpstown'),
84     ('BR2', 'Beloit', '3 West Rd. Beloit'),
85     ('BR3', 'Drive Lake Charles', '824 Rock Maple Drive Lake Charles');
86
87
88 INSERT INTO BORROWER (Card_no, Borrower_name, Address, Phone)
89 VALUES
90     ('C1', 'John Smith', '731 Fondren, Houston, TX', '(206) 342-8631'),
91     ('C2', 'Franklin Wong', '638 Voss, Houston, TX', '(717) 550-1675'),
92     ('C3', 'Alicia Zelaya', '3321 Castle, Spring, TX', '(248) 762-0356');
93
94
95 INSERT INTO BOOK_LOANS (Book_id, Branch_id, Card_no, Date_out, Due_date)
96 VALUES
97     ('B1', 'BR1', 'C1', '2023-01-05', '2023-02-05'),
98     ('B2', 'BR2', 'C2', '2022-12-06', '2023-01-06'),
99     ('B3', 'BR3', 'C2', '2023-01-29', '2023-02-29');
100
101
102 SELECT * FROM BOOK;
103 SELECT * FROM PUBLISHER;
104 SELECT * FROM BOOK_LOANS;
105 SELECT * FROM LIBRARY_BRANCH;
106 SELECT * FROM BOOK_AUTHORS;
107 SELECT * FROM BOOK_COPIES;
108 SELECT * FROM BORROWER;
109
110 ALTER TABLE BOOK_LOANS ALTER COLUMN Date_out date;
111 ALTER TABLE BOOK_LOANS ALTER COLUMN Due_date date;

```