

Hello Raj:

Thanks for your email! I would like to help you.

I've created 5-10 rows of sample data to each table from two databases – circulation and newspaper (called HW8). I took screenshot of the relational diagrams, tables, and my queries for your reference as below:

### Database: circulation

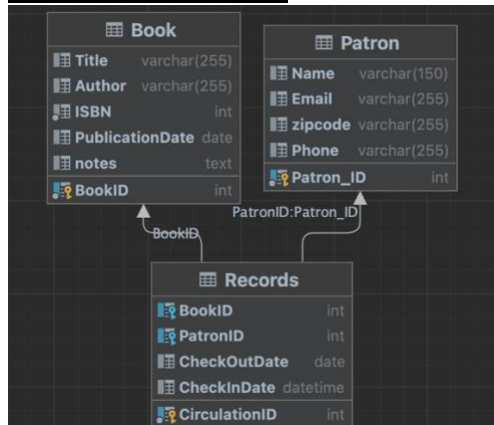


Table 1: Book

	BookID	Title	Author	ISBN	PublicationDate	notes
1	1	Orange Is ...	Jane	978755	2023-11-18	About relig...
2	2	BookID: int	Michael	495592	2023-11-08	Family
3	3	Building th...	Joe	394596	2023-07-18	<null>
4	4	Zero	Gariot	204056	2023-06-06	Math
5	5	A Girl with...	Nancy	405201	2017-07-05	<null>

```
circulation> INSERT INTO circulation.Book (BookID, Title, Author, ISBN, PublicationDate, notes) VALUES (1, 'Orange Is Not the Only Fruit', 'Jane', 978755, '2023-11-18', 'About relig...')
[2023-11-18 23:02:45] 1 row affected in 96 ms
circulation> INSERT INTO circulation.Book (BookID, Title, Author, ISBN, PublicationDate, notes) VALUES (2, 'Father', 'Michael', 495592, '2023-11-08', 'Family')
[2023-11-18 23:07:03] 1 row affected in 160 ms
circulation> INSERT INTO circulation.Book (BookID, Title, Author, ISBN, PublicationDate, notes) VALUES (3, 'Building the Great Wall', 'Joe', 394596, '2023-07-18', null)
[2023-11-18 23:07:04] 1 row affected in 320 ms
circulation> INSERT INTO circulation.Book (BookID, Title, Author, ISBN, PublicationDate, notes) VALUES (4, 'Zero', 'Gariot', 204056, '2023-06-06', 'Math')
[2023-11-18 23:07:04] 1 row affected in 88 ms
circulation> INSERT INTO circulation.Book (BookID, Title, Author, ISBN, PublicationDate, notes) VALUES (5, 'A Girl with a Pocket', 'Nancy', 405201, '2017-07-05', null)
[2023-11-18 23:07:04] 1 row affected in 95 ms
```

Table 2: Patron

	Patron_ID	Name	Email	zipcode	Phone
1	1	Jo Card	jcard@umcih...	03451	3547593920
2	2	Johnson Woo	jwoo@umich.e...	29559	7283849503
3	3	Becky White	bwhite@umich...	17465	4829485923
4	4	Tom Ford	tford@umcih...	92349	1384859302
5	5	Swanson App...	sapple@umich...	02451	8828374759

```
circulation> INSERT INTO circulation.Patron (Patron_ID, Name, Email, zipcode, Phone) VALUES (1, 'Jo Card', 'jcard@umcih.edu', '03451', '3547593920')
[2023-11-18 23:16:22] 1 row affected in 139 ms
circulation> INSERT INTO circulation.Patron (Patron_ID, Name, Email, zipcode, Phone) VALUES (2, 'Johnson Woo', 'jwoo@umich.edu', '29559', '7283849503')
[2023-11-18 23:16:22] 1 row affected in 98 ms
circulation> INSERT INTO circulation.Patron (Patron_ID, Name, Email, zipcode, Phone) VALUES (3, 'Becky White', 'bwhite@umich.edu', '17465', '4829485923')
[2023-11-18 23:16:22] 1 row affected in 99 ms
circulation> INSERT INTO circulation.Patron (Patron_ID, Name, Email, zipcode, Phone) VALUES (4, 'Tom Ford', 'tford@umcih.edu', '92349', '1384859302')
[2023-11-18 23:16:22] 1 row affected in 84 ms
circulation> INSERT INTO circulation.Patron (Patron_ID, Name, Email, zipcode, Phone) VALUES (5, 'Swanson Apple', 'sapple@umich.edu', '02451', '8828374759')
[2023-11-18 23:16:22] 1 row affected in 84 ms
```

Table 3: Records

	CirculationID	BookID	PatronID	CheckOutDate	CheckInDate
1	1	2	3	2023-11-18	2019-11-17 12:0...
2	2	3	2	2023-11-18	2021-11-08 05:3...
3	3	1	5	2023-11-18	2020-11-02 07:2...
4	4	4	4	2023-11-18	2021-11-24 12:0...
5	5	5	1	2023-11-18	2021-11-16 03:1...

```
circulation> INSERT INTO circulation.Records (CirculationID, BookID, PatronID, CheckOutDate, CheckInDate) VALUES (2, 3, 2, '2023-11-18', '2021-11-08 05:34:00')
[2023-11-18 23:24:50] 1 row affected in 156 ms
circulation> INSERT INTO circulation.Records (CirculationID, BookID, PatronID, CheckOutDate, CheckInDate) VALUES (3, 1, 5, '2023-11-18', '2020-11-02 07:28:00')
[2023-11-18 23:24:51] 1 row affected in 85 ms
circulation> INSERT INTO circulation.Records (CirculationID, BookID, PatronID, CheckOutDate, CheckInDate) VALUES (4, 4, 4, '2023-11-18', '2021-11-24 12:01:03')
[2023-11-18 23:24:51] 1 row affected in 86 ms
circulation> INSERT INTO circulation.Records (CirculationID, BookID, PatronID, CheckOutDate, CheckInDate) VALUES (5, 5, 1, '2023-11-18', '2021-11-16 03:13:42')
[2023-11-18 23:24:51] 1 row affected in 88 ms
circulation> INSERT INTO circulation.Records (CirculationID, BookID, PatronID, CheckOutDate, CheckInDate) VALUES (1, 2, 3, '2023-11-18', '2019-11-17 12:00:00')
[2023-11-18 23:24:51] 1 row affected in 91 ms
```

Database: newspaper (HW8)

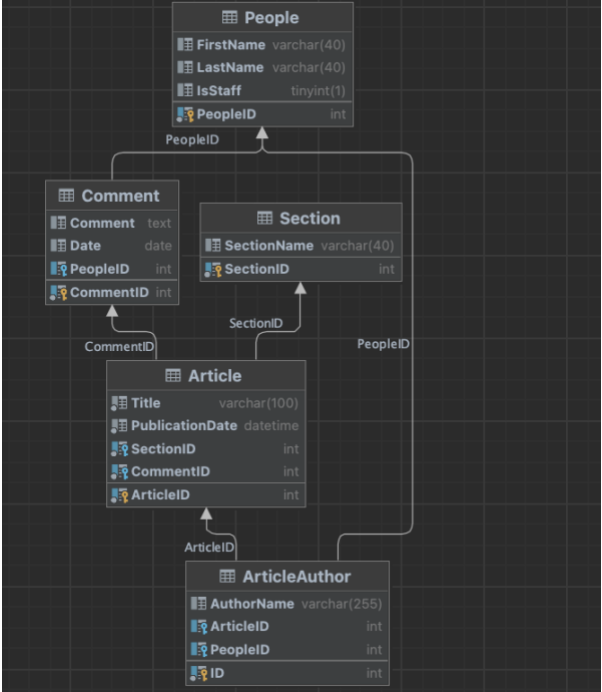


Table 1:Section

	SectionID	SectionName
1	2	Ending
2	4	Ending
3	1	Introduction
4	5	Introduction
5	3	Main

```
HW8> INSERT INTO HW8.Section (SectionID, SectionName) VALUES (1, 'Introduction')
[2023-11-18 23:32:42] 1 row affected in 135 ms
HW8> INSERT INTO HW8.Section (SectionID, SectionName) VALUES (2, 'Ending')
[2023-11-18 23:32:42] 1 row affected in 86 ms
HW8> INSERT INTO HW8.Section (SectionID, SectionName) VALUES (3, 'Main')
[2023-11-18 23:32:42] 1 row affected in 88 ms
HW8> INSERT INTO HW8.Section (SectionID, SectionName) VALUES (4, 'Ending')
[2023-11-18 23:32:42] 1 row affected in 82 ms
HW8> INSERT INTO HW8.Section (SectionID, SectionName) VALUES (5, 'Introduction')
[2023-11-18 23:32:42] 1 row affected in 90 ms
```

Table 2: People

	🔍 PeopleID ↕	📄 FirstName ↕	📄 LastName ↕	📄 IsStaff ↕
1	1	John	Lee	1
2	2	Bing	Yang	0
3	3	Jae	Xu	1
4	4	Siyuan	Chen	1
5	5	Keanna	White	0
6	6	Lucianna	King	1
7	7	Rancy	Lu	1
8	8	Michael	Mo	0
9	9	Mia	Abate	0
10	10	Kang	Kuan	0

```

HW8> INSERT INTO HW8.People (PeopleID, FirstName, LastName, IsStaff) VALUES (1, 'John', 'Lee', 1)
[2023-11-18 23:55:58] 1 row affected in 165 ms
HW8> INSERT INTO HW8.People (PeopleID, FirstName, LastName, IsStaff) VALUES (2, 'Bing', 'Yang', 0)
[2023-11-18 23:55:59] 1 row affected in 119 ms
HW8> INSERT INTO HW8.People (PeopleID, FirstName, LastName, IsStaff) VALUES (3, 'Jae', 'Xu', 1)
[2023-11-18 23:55:59] 1 row affected in 83 ms
HW8> INSERT INTO HW8.People (PeopleID, FirstName, LastName, IsStaff) VALUES (4, 'Siyuan', 'Chen', 1)
[2023-11-18 23:55:59] 1 row affected in 86 ms
HW8> INSERT INTO HW8.People (PeopleID, FirstName, LastName, IsStaff) VALUES (5, 'Keanna', 'White', 0)
[2023-11-18 23:55:59] 1 row affected in 85 ms
HW8> INSERT INTO HW8.People (PeopleID, FirstName, LastName, IsStaff) VALUES (6, 'Lucianna', 'King', 1)
[2023-11-18 23:57:41] 1 row affected in 140 ms
HW8> INSERT INTO HW8.People (PeopleID, FirstName, LastName, IsStaff) VALUES (7, 'Rancy', 'Lu', 1)
[2023-11-18 23:57:41] 1 row affected in 86 ms
HW8> INSERT INTO HW8.People (PeopleID, FirstName, LastName, IsStaff) VALUES (8, 'Michael', 'Mo', 0)
[2023-11-18 23:57:41] 1 row affected in 100 ms
HW8> INSERT INTO HW8.People (PeopleID, FirstName, LastName, IsStaff) VALUES (9, 'Mia', 'Abate', 0)
[2023-11-18 23:57:42] 1 row affected in 90 ms
HW8> INSERT INTO HW8.People (PeopleID, FirstName, LastName, IsStaff) VALUES (10, 'Kang', 'Kuan', 0)
[2023-11-18 23:57:42] 1 row affected in 90 ms

```

Table 3: Comment

	🔍 CommentID ↕	📄 Comment ↕	📄 Date ↕	🔍 PeopleID ↕
1	1	Good	2023-11-03	2
2	2	Fair	2023-11-04	8
3	3	Excellent	2023-11-08	9
4	4	Not Good	2023-11-18	10
5	5	Fair	2023-11-06	5

```

HW8> INSERT INTO HW8.Comment (CommentID, Comment, Date, PeopleID) VALUES (1, 'Good', '2023-11-03', 2)
[2023-11-19 00:00:11] 1 row affected in 130 ms
HW8> INSERT INTO HW8.Comment (CommentID, Comment, Date, PeopleID) VALUES (2, 'Fair', '2023-11-04', 8)
[2023-11-19 00:00:11] 1 row affected in 113 ms
HW8> INSERT INTO HW8.Comment (CommentID, Comment, Date, PeopleID) VALUES (3, 'Excellent', '2023-11-08', 9)
[2023-11-19 00:00:11] 1 row affected in 81 ms
HW8> INSERT INTO HW8.Comment (CommentID, Comment, Date, PeopleID) VALUES (4, 'Not Good', '2023-11-18', 10)
[2023-11-19 00:00:11] 1 row affected in 87 ms
HW8> INSERT INTO HW8.Comment (CommentID, Comment, Date, PeopleID) VALUES (5, 'Fair', '2023-11-06', 5)
[2023-11-19 00:00:11] 1 row affected in 88 ms

```

Table 4: Article

	ArticleID	Title	PublicationDate	SectionID	CommentID
1	1	No Zuo No D...	2016-11-19 00:09:16	1	4
2	2	Why People ...	2013-11-22 00:09:21	4	1
3	3	Contaminati...	2017-11-19 00:09:26	3	2
4	4	Drinking Wa...	2016-10-19 00:09:29	5	3
5	5	A.P.C	2015-06-19 00:09:33	2	5

```

HW8> INSERT INTO HW8.Article (ArticleID, Title, PublicationDate, SectionID, CommentID) VALUES (1, 'No Zuo No Die', '2016-11-19 00:09:16', 1, 4)
[2023-11-19 00:10:10] 1 row affected in 149 ms
HW8> INSERT INTO HW8.Article (ArticleID, Title, PublicationDate, SectionID, CommentID) VALUES (2, 'Why People Get Crazy during Black Friday', '2013-11-22 00:09:21', 4, 1)
[2023-11-19 00:10:10] 1 row affected in 98 ms
HW8> INSERT INTO HW8.Article (ArticleID, Title, PublicationDate, SectionID, CommentID) VALUES (3, 'Contamination at Lake Michigan', '2017-11-19 00:09:26', 3, 2)
[2023-11-19 00:10:10] 1 row affected in 86 ms
HW8> INSERT INTO HW8.Article (ArticleID, Title, PublicationDate, SectionID, CommentID) VALUES (4, 'Drinking Water', '2016-10-19 00:09:29', 5, 3)
[2023-11-19 00:10:11] 1 row affected in 92 ms
HW8> INSERT INTO HW8.Article (ArticleID, Title, PublicationDate, SectionID, CommentID) VALUES (5, 'A.P.C', '2015-06-19 00:09:33', 2, 5)
[2023-11-19 00:10:11] 1 row affected in 96 ms

```

Table 5: ArticleAuthor

	ID	AuthorName	ArticleID	PeopleID
1	1	John Lee	2	5
2	2	Jo Hu	3	4
3	3	Michael White	4	2
4	4	Mia Abate	1	1
5	5	Mo Xu	5	3

```

HW8> INSERT INTO HW8.ArticleAuthor (ID, AuthorName, ArticleID, PeopleID) VALUES (1, 'John Lee', 2, 5)
[2023-11-19 00:11:26] 1 row affected in 129 ms
HW8> INSERT INTO HW8.ArticleAuthor (ID, AuthorName, ArticleID, PeopleID) VALUES (2, 'Jo Hu', 3, 4)
[2023-11-19 00:11:26] 1 row affected in 86 ms
HW8> INSERT INTO HW8.ArticleAuthor (ID, AuthorName, ArticleID, PeopleID) VALUES (3, 'Michael White', 4, 2)
[2023-11-19 00:11:26] 1 row affected in 92 ms
HW8> INSERT INTO HW8.ArticleAuthor (ID, AuthorName, ArticleID, PeopleID) VALUES (4, 'Mia Abate', 1, 1)
[2023-11-19 00:11:26] 1 row affected in 94 ms
HW8> INSERT INTO HW8.ArticleAuthor (ID, AuthorName, ArticleID, PeopleID) VALUES (5, 'Mo Xu', 5, 3)
[2023-11-19 00:11:26] 1 row affected in 95 ms

```

Following your instruction, I've also deleted 3 rows from the table Records and update the last row of the table in a different checkout date.

**delete:**

```

use circulation;
delete from Records order by rand() limit 3;

```

	CirculationID	BookID	PatronID	CheckOutDate	CheckInDate
1	3	1	5	2023-11-18	2020-11-02 07:28:00
2	4	4	4	2023-11-18	2021-11-24 12:01:03

**update:**

```

circulation> UPDATE circulation.Records t SET t.CheckOutDate = '2023-11-11' WHERE t.CirculationID = 4
[2023-11-19 00:23:21] 1 row affected in 132 ms

```

	CirculationID	BookID	PatronID	CheckOutDate	CheckInDate
1	3	1	5	2023-11-18	2020-11-02 07:28:00
2	4	4	4	2023-11-11	2021-11-24 12:01:03

Please let me know if you have any questions, concerns, or comments. Thank you!

Best,  
Jae