

Assignment-3

Assignment 3: Write SQL statements to CREATE a new database and tables that reflect the library schema you designed earlier. Use ALTER statements to modify the table structures and DROP statements to remove a redundant table.

Create table Bookdetail

```
(  
books_id int primary key,  
title varchar2(30) not null,  
author varchar2(30),  
genre varchar2(50),  
publication_year int,  
isbn varchar2(13) unique  
);  
desc Bookdetail;
```

The screenshot shows the Oracle Database Express Edition interface. The SQL Command window contains the following text:

```
CREATE TABLE BOOKDETAIL  
(  
  books_id int primary key,  
  title varchar2(30) not null,  
  author varchar2(30),  
  genre varchar2(50),  
  publication_year int,  
  isbn varchar2(13) unique  
);  
  
DESC BOOKDETAIL;
```

Below the command window, the 'Describe' tab is selected, showing the structure of the BOOKDETAIL table:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
BOOKDETAIL	BOOKS_ID	Number	-	-	0	1	-	-	-
	TITLE	Varchar2	30	-	-	-	-	-	-
	AUTHOR	Varchar2	30	-	-	-	✓	-	-
	GENRE	Varchar2	50	-	-	-	✓	-	-
	PUBLICATION_YEAR	Number	-	-	0	-	✓	-	-
	ISBN	Varchar2	13	-	-	-	✓	-	-

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Create table authorss

```
(  
author_id int primary key,  
name varchar2(20) not null,  
birth_year int  
);
```

desc authorss;

User: SYSTEM

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```
Create table authorss
(
  author_id int primary key,
  name varchar2(20) not null,
  birth_year int
);
```

```
desc authorss;
```

```
Create table Members
(
  id int primary key,
  name varchar2(20) not null,
  email varchar(20),
```

Results Explain Describe Saved SQL History

Object Type TABLE Object AUTHORSS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
AUTHORSS	AUTHOR_ID	Number	-	-	0	1	-	-	-
	NAME	Varchar2	20	-	-	-	-	-	-
	BIRTH_YEAR	Number	-	-	0	-	✓	-	-
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Create table memberOfstud

```
(
  id int primary key,
  name varchar2(20) not null,
  email varchar(20),
  phone varchar(15),
  address varchar(30)
);
desc memberOfstud;
```

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desc authorss;

```

Create table memberOfstud
(
id int primary key,
name varchar2(20) not null,
email varchar(20),
phone varchar(15),
address varchar(30)
);
desc memberOfstud;

```

Create table borrowings

Results Explain Describe Saved SQL History

Object Type TABLE Object MEMBEROFSTUD

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
MEMBEROFSTUD	ID	Number	-	-	0	1	-	-	-
	NAME	Varchar2	20	-	-	-	-	-	-
	EMAIL	Varchar2	20	-	-	-	✓	-	-
	PHONE	Varchar2	15	-	-	-	✓	-	-
	ADDRESS	Varchar2	30	-	-	-	✓	-	-

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Create table borrowingstud

(

borrowing_id int primary key,

books_id int not null,

id int not null,

Borrow_Date Date,

Return_Date Date,

constraints fkBookdetail foreign key (books_id) references Bookdetail(books_id),

constraints fkmemberOfstud foreign key (id) references memberOfstud(id),

check (Return_Date >= Borrow_Date)

);

desc borrowingstud;

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```

desc memberOfstud;

Create table borrowingstud
(
  borrowing_id int primary key,
  books_id int not null,
  id int not null,
  Borrow_Date Date,
  Return_Date Date,
  constraints fkBookdetail foreign key (books_id) references Bookdetail(books_id),
  constraints fkmemberOfstud foreign key (id) references memberOfstud(id),
  check (Return_Date >= Borrow_Date)
);
desc borrowingstud;

```

Results Explain Describe Saved SQL History

Object Type TABLE Object BORROWINGSTUD

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
BORROWINGSTUD	BORROWING_ID	Number	-	-	0	1	-	-	-
	BOOKS_ID	Number	-	-	0	-	-	-	-
	ID	Number	-	-	0	-	-	-	-
	BORROW_DATE	Date	7	-	-	-	✓	-	-
	RETURN_DATE	Date	7	-	-	-	✓	-	-
1 - 5									

Language: en-us

alter table Bookdetail
add author_id int;

drop table authorss;

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```

id int not null,
Borrow_Date Date,
Return_Date Date,
constraints fkBookdetail foreign key (books_id) references Bookdetail(books_id),
constraints fkmemberOfstud foreign key (id) references memberOfstud(id),
check (Return_Date >= Borrow_Date)
);
desc borrowingstud;

alter table Bookdetail
add author_id int;

drop table authorss;

```

Results Explain Describe Saved SQL History

Table dropped.

0.06 seconds