

## Assignment-4

Assignment 4: 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 (  
    bookid int primary key,  
    isbn varchar2(13) unique not null,  
    title varchar2(255) not null,  
    author varchar2(255) not null,  
    publisher varchar2(255),  
);
```

```
desc bookdetail;
```

```
alter table bookdetail add email varchar2(255);
```

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

```
create table bookdetail (  
    bookid int primary key,  
    isbn varchar2(13) unique not null,  
    title varchar2(255) not null,  
    author varchar2(255) not null,  
    publisher varchar2(255)  
);  
  
desc bookdetail;  
  
alter table bookdetail add email varchar2(255);
```

The Results tab shows the table structure for BOOKDETAIL:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
BOOKDETAIL	BOOKID	Number	-	-	0	1	-	-	-
	ISBN	Varchar2	13	-	-	-	-	-	-
	TITLE	Varchar2	255	-	-	-	-	-	-
	AUTHOR	Varchar2	255	-	-	-	-	-	-
	PUBLISHER	Varchar2	255	-	-	-	✓	-	-
	EMAIL	Varchar2	255	-	-	-	✓	-	-

The bottom of the window shows the JavaScript code: `javascript:ret_Column('EMAIL');` and the version: `Application Express 2.1.0.00.39`.

```
create table students (  
    studentid int primary key,  
    firstname varchar(255) not null,  
    lastname varchar(255) not null,  
    email varchar(255) unique not null,  
    phonenumber varchar(15) unique,  
    enrollmentdate date not null,  
    status varchar(50) not null check (status in ('active', 'inactive'))  
);
```

```
desc students;
alter table students modify phonenummer varchar2(20);
```

The screenshot shows the Oracle Database Express Edition web interface. The browser address bar displays the URL: 127.0.0.1:9500/apex/f?p=4500:1003:402899216258833::NO::: The page title is "ORACLE Database Express Edition". The user is logged in as "SYSTEM". The navigation bar shows "Home > SQL > SQL Commands". The main content area has a "Save" button and a "Run" button. The SQL editor contains the following code:

```
create table students (
  studentid int primary key,
  firstname varchar2(255) not null,
  lastname varchar2(255) not null,
  email varchar2(255) unique not null,
  phonenummer varchar2(15) unique,
  enrollmentdate date not null,
  status varchar2(50) not null check (status in ('active', 'inactive'))
);

desc students;

alter table students modify phonenummer varchar2(20);
```

Below the SQL editor, there is a tabbed interface with "Results", "Explain", "Describe", "Saved SQL", and "History". The "Describe" tab is selected, showing the table structure for "STUDENTS".

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
STUDENTS	STUDENTID	Number	-	-	0	1	-	-	-
	FIRSTNAME	Varchar2	255	-	-	-	-	-	-
	LASTNAME	Varchar2	255	-	-	-	-	-	-
	EMAIL	Varchar2	255	-	-	-	-	-	-
	PHONENUMBER	Varchar2	20	-	-	-	✓	-	-
	ENROLLMENTDATE	Date	7	-	-	-	-	-	-
	STATUS	Varchar2	50	-	-	-	-	-	-

At the bottom right of the table, it says "1 - 7".

```
create table return1 (
  returnid int primary key,
  issueid int not null,
  returndate date not null,
  condition varchar2(50) not null check (condition in ('good', 'damaged', 'lost')),
  fineamount decimal(10, 2) default 0 check (fineamount >= 0),
  foreign key (issueid) references issue(issueid)
);
```

```
desc return1;
drop table return1;
```

User: SYSTEM

Home &gt; SQL &gt; SQL Commands

☒ Autocommit Display 10

Save

Run

```
create table return1 (  
  returnid int primary key,  
  issueid int not null,  
  returndate date not null,  
  condition varchar2(50) not null check (condition in ('good', 'damaged', 'lost')),  
  fineamount decimal(10, 2) default 0 check (fineamount >= 0),  
  foreign key (issueid) references issue(issueid)  
);  
  
desc return1;  
  
drop table return1;
```

[Results](#) [Explain](#) [Describe](#) [Saved SQL](#) [History](#)

Table dropped.

0.09 seconds

Language: en-us

Application Express 2.1.0.00.39  
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