

create database student_enrollment;

use student_enrollment;

**CREATE TABLE student(
 regno VARCHAR(15),
 name VARCHAR(20),
 major VARCHAR(20),
 bdate DATE,
 PRIMARY KEY (regno));**

**CREATE TABLE course(
 courseno INT,
 cname VARCHAR(20),
 dept VARCHAR(20),
 PRIMARY KEY (courseno));**

**CREATE TABLE enroll(
 regno VARCHAR(15),
 courseno INT,
 sem INT(3),
 marks INT(4),
 PRIMARY KEY (regno,courseno),
 FOREIGN KEY (regno) REFERENCES student (regno),
 FOREIGN KEY (courseno) REFERENCES course (courseno));**

**CREATE TABLE text(
 book_isbn INT(5),**

```
book_title VARCHAR(20),  
publisher VARCHAR(20),  
author VARCHAR(20),  
PRIMARY KEY (book_isbn) );
```

```
CREATE TABLE book_adoption(  
courseno INT,  
sem INT(3),  
book_isbn INT(5),  
PRIMARY KEY (courseno,book_isbn),  
FOREIGN KEY (courseno) REFERENCES course (courseno) on update  
cascade,  
FOREIGN KEY (book_isbn) REFERENCES text(book_isbn)on update cascade  
);
```

```
INSERT INTO student (regno,name,major,bdate) VALUES  
( '1pe11cs002','b','sr','19930924'),  
( '1pe11cs003','c','sr','19931127'),  
( '1pe11cs004','d','sr','19930413'),  
( '1pe11cs005','e','jr','19940824');
```

```
INSERT INTO course VALUES (111,'OS','CSE'),  
(112,'EC','CSE'),  
(113,'SS','ISE'),  
(114,'DBMS','CSE'),  
(115,'SIGNALS','ECE');
```

```
INSERT INTO text (book_isbn,book_title,publisher,author)VALUES
(10,'DATABASE SYSTEMS','PEARSON','SCHIELD'),
(900,'OPERATING SYS','PEARSON','LELAND'),
(901,'CIRCUITS','HALL INDIA','BOB'),
(902,'SYSTEM SOFTWARE','PETERSON','JACOB'),
(903,'SCHEDULING','PEARSON','PATIL'),
(904,'DATABASE SYSTEMS','PEARSON','JACOB'),
(905,'DATABASE MANAGER','PEARSON','BOB'),
(906,'SIGNALS','HALL INDIA','SUMIT');
```

```
select * from BOOK_ADOPTION;
```

```
INSERT INTO enroll (regno,courseno,sem,marks) VALUES
('1pe11cs002',114,5,100),
('1pe11cs003',113,5,100),
('1pe11cs004',111,5,100),
('1pe11cs005',112,3,100);
```

```
INSERT INTO book_adoption (courseno,sem,book_isbn) VALUES
(111,5,900),
(111,5,903),
(111,5,904),
(112,3,901),
(113,3,10),
(114,5,905),
(113,5,902),
(115,3,906);
```

DELETE FROM TEXT WHERE BOOK_ISBN=23;

**INSERT INTO text (book_isbn,book_title,publisher,author)VALUES
(23,'ADA','PEARSON','SCHIELD');**

**INSERT INTO book_adoption (courseno,sem,book_isbn) VALUES
(111,5,23);**

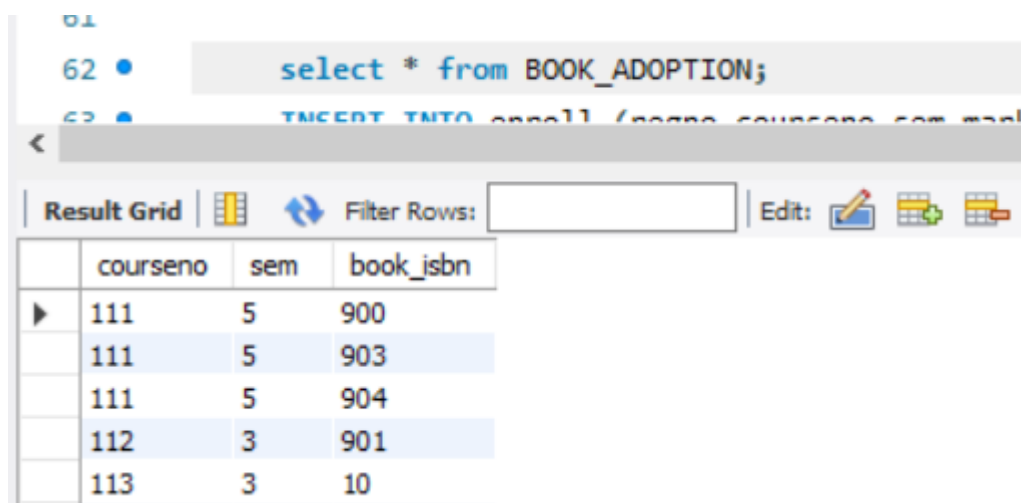
SELECT * FROM BOOK_ADOPTION;

**SELECT c.courseno,t.book_isbn,t.book_title
FROM course c,book_adoption ba,text t
WHERE c.courseno=ba.courseno
AND ba.book_isbn=t.book_isbn
AND c.dept='CSE'
AND 2<(
SELECT COUNT(book_isbn)
FROM book_adoption b
WHERE c.courseno=b.courseno)
ORDER BY t.book_title;**

**SELECT DISTINCT c.dept
FROM course c
WHERE c.dept IN
(SELECT c.dept
FROM course c,book_adoption b,text t
WHERE c.courseno=b.courseno
AND t.book_isbn=b.book_isbn**

```
AND t.publisher='PEARSON')  
AND c.dept NOT IN  
(SELECT c.dept  
FROM course c,book_adoption b,text t  
WHERE c.courseno=b.courseno  
AND t.book_isbn=b.book_isbn  
AND t.publisher != 'PEARSON');
```

TABLES:



The screenshot shows a database query interface. At the top, a SQL query is entered in a text area: `select * from BOOK_ADOPTION;`. Below the query, there is a toolbar with icons for 'Result Grid', 'Filter Rows', and 'Edit'. The 'Result Grid' is active, displaying a table with the following data:

	courseno	sem	book_isbn
▶	111	5	900
	111	5	903
	111	5	904
	112	3	901
	113	3	10

```
114 • select * from ENROLL;
```

<				
Result Grid				
Filter Rows:				
	regno	courseno	sem	marks
▶	1pe11cs002	114	5	100
	1pe11cs003	113	5	100
	1pe11cs004	111	5	100
	1pe11cs005	112	3	100
*	NULL	NULL	NULL	NULL

```
115 • select * from course;
```

```
114 • select * from text;
```

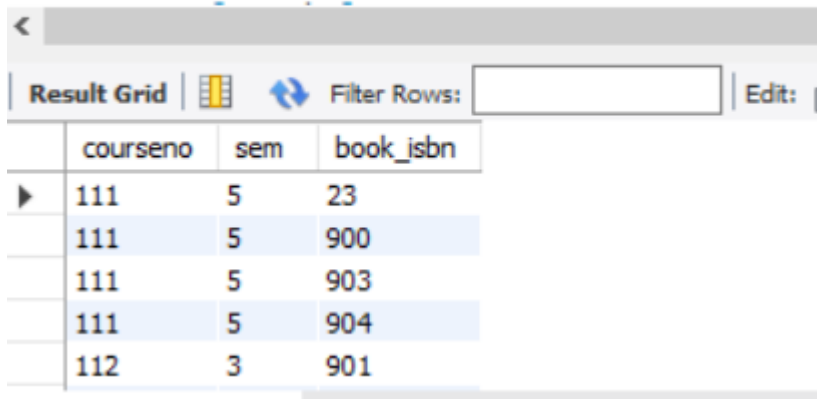
<				
Result Grid				
Filter Rows:				
Edit:				
	book_isbn	book_title	publisher	author
▶	10	DATABASE SYSTEMS	PEARSON	SCHIELD
	23	ADA	PEARSON	SCHIELD
	900	OPERATING SYS	PEARSON	LELAND
	901	CIRCUITS	HALL INDIA	BOB
	902	SYSTEM SOFTWARE	PETERSON	JACOB

```
113 • select * from course;
```

Result Grid		
Filter Rows:		
	courseno	cname
	111	OS
	112	EC
	113	SS
	114	DBMS
	115	SIGNALS

111

112 • `select * from book_adoption;`



	courseno	sem	book_isbn
▶	111	5	23
	111	5	900
	111	5	903
	111	5	904
	112	3	901

QUERIES:

1.

79 • `INSERT INTO text (book_isbn,book_title,publisher,author)VALUES`

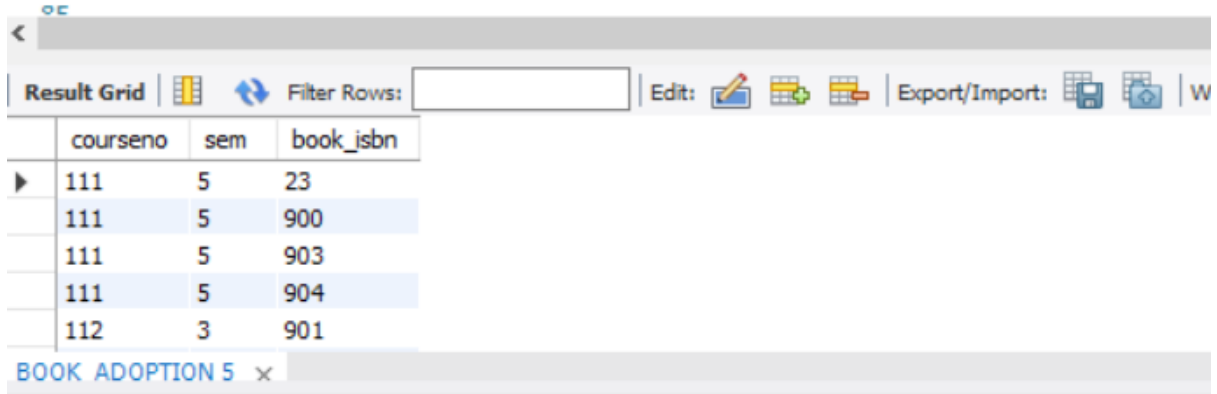
80 `(23,'ADA','PEARSON','SCHIELD');`

81

82 • `INSERT INTO book_adoption (courseno,sem,book_isbn) VALUES`

83 `(111,5,23);`

84 • `SELECT * FROM BOOK_ADOPTION;`



	courseno	sem	book_isbn
▶	111	5	23
	111	5	900
	111	5	903
	111	5	904
	112	3	901

BOOK ADOPTION 5 x

2.

```

86 • SELECT c.courseno,t.book_isbn,t.book_title
87     FROM course c,book_adoption ba,text t
88     WHERE c.courseno=ba.courseno
89     AND ba.book_isbn=t.book_isbn
90     AND c.dept='CSE'
91     AND 2<(
92     SELECT COUNT(book_isbn)
93     FROM book_adoption b
94     WHERE c.courseno=b.courseno)
95     ORDER BY t.book_title;

```

Result Grid

	courseno	book_isbn	book_title
▶	111	23	ADA
	111	904	DATABASE SYSTEMS
	111	900	OPERATING SYS
	111	903	SCHEDULING

3.

```

97 • SELECT DISTINCT c.dept
98     FROM course c
99     WHERE c.dept IN
100     ( SELECT c.dept
101     FROM course c,book_adoption b,text t
102     WHERE c.courseno=b.courseno
103     AND t.book_isbn=b.book_isbn
104     AND t.publisher='PEARSON')
105     AND c.dept NOT IN
106     (SELECT c.dept
107     FROM course c,book_adoption b,text t
108     WHERE c.courseno=b.courseno
109     AND t.book_isbn=b.book_isbn
110     AND t.publisher != 'PEARSON');

```

Result Grid

	dept
▶	CSE
	ISE
	ECE

course 38 ▼