LAB 8

Student Enrollment

CODE:

```
create table student8(
regno varchar(30),
name varchar(30),
major varchar(30),
bdate date,
primary key(regno));

create table course(
course_no int,
cname varchar(10),
dept varchar(30),
primary key(course_no));

create table enroll(
regno varchar(30),
course_no int,
sem int,
marks int,
primary key(regno,course_no),
foreign key(regno) references student8(regno) on delete cascade,
foreign key(course_no) references course(course_no) on delete cascade);


create table text(
book_isbn int,
book_title varchar(50),
publisher varchar(50),
author varchar(50),
primary key(book_isbn));

create table book_adoption(
course_no int,
sem int,
book_isbn int,
primary key(course_no,book_isbn),
foreign key(course_no) references course(course_no) on delete cascade,
foreign key(book_isbn) references text(book_isbn) on delete cascade);

INSERT INTO student8 VALUES ('1bm18cs001','a','sr','09-DEC-17');
INSERT INTO student8 VALUES ('1bm18cs002','b','sr','01-JUN-17');
INSERT INTO student8 VALUES ('1bm18cs003','c','sr','27-NOV-93');
```

```sql
INSERT INTO student8 VALUES ('1bm18cs004','d','sr','13-APR-93');
INSERT INTO student8 VALUES ('1bm18cs005','e','jr','24-AUG-94');


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

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

INSERT INTO enroll VALUES ('1bm18cs001',115,3,100);
INSERT INTO enroll VALUES('1bm18cs002',114,5,100);
INSERT INTO enroll VALUES('1bm18cs003',113,5,100);
INSERT INTO enroll VALUES('1bm18cs004',111,5,100);
INSERT INTO enroll VALUES('1bm18cs005',112,3,100);

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

INSERT INTO book_adoption VALUES (112,5,906);

select * from student8;

select * from course;
select * from text;
select * from enroll;
select * from book_adoption;

SELECT c.course_no,t.book_isbn,t.book_title
    FROM course c,book_adoption ba,text t
    WHERE c.course_no=ba.course_no
    AND ba.book_isbn=t.book_isbn
    AND c.dept='CSE'
    AND 2<( SELECT COUNT(book_isbn)
    FROM book_adoption b
    WHERE c.course_no=b.course_no)
```

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

OUTPUT:

TABLES:

Student:

	REGNO	NAME	MAJOR	BDATE
1	lbm18cs002	b	sr	01-06-17
2	lbm18cs003	c	sr	27-11-93
3	lbm18cs004	d	sr	13-04-93
4	lbm18cs005	e	jr	24-08-94
5	lbm18cs001	a	sr	09-12-17

Course:

	COURSE_NO	CNAME	DEPT
1	111	OS	CSE
2	112	EC	CSE
3	113	SS	ISE
4	114	DBMS	CSE
5	115	SIGNALS	ECE

Enroll:

	REGNO	COURSE_NO	SEM	MARKS
1	lbm18cs002	114	5	100
2	lbm18cs003	113	5	100
3	lbm18cs004	111	5	100
4	lbm18cs005	112	3	100
5	lbm18cs001	115	3	100

Text: Book Adoption:

	BOOK_ISBN	BOOK_TITLE	PUBLISHER	AUTHOR
1	10	DATABASE SYSTEMS	PEARSON	SCHIELD
2	900	OPERATING SYS	PEARSON	LELAND
3	901	CIRCUITS	HALL INDIA	BOB
4	902	SYSTEM SOFTWARE	PETERSON	JACOB
5	903	SCHEDULING	PEARSON	PATIL
6	904	DATABASE SYSTEMS	PEARSON	JACOB
7	905	DATABASE MANAGER	PEARSON	BOB
8	906	SIGNALS	HALL INDIA	SUMIT

	COURSE_NO	SEM	BOOK_ISBN
1	111	5	900
2	111	5	903
3	111	5	904
4	112	3	901
5	113	3	10
6	114	5	905
7	113	5	902
8	115	3	906

QUERY:

1]

	COURSE_NO	BOOK_ISBN	BOOK_TITLE
1	111	904	DATABASE SYSTEMS
2	111	900	OPERATING SYS
3	111	903	SCHEDULING

2]

	DEPT
1	CSE
2	ISE