

LAB 8:

STUDENT DATABASE

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');
```

```
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:

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_ISBN	BOOK_TITLE	PUBLISHER	AUTHOR
1	10 DATABASE SYSTEMS	PEARSON	SCHILD
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

Book Adoption:

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