LAB 8- STUDENT ENROLLMENT DATABASE

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1BM19CS194

4-D

```
create database student_enroll;

use student_enroll;



        create table student(

regno varchar(15),

name varchar(20),

major varchar(20),

bdate date,  primary

key(regno));          desc

student;



        create table course(

courseno int,        cname

varchar(20), dept

varchar(20), primary
```

```sql
key(courseno)); desc
course;


create table enroll(        regno varchar(15),
courseno int,       sem int,        marks int,    primary
key(regno,courseno),     foreign key(regno) references
student(regno),     foreign key(courseno) references
course(courseno));        desc enroll;  create table
textbook(    book_isbn int,        book_title varchar(20),
publisher varchar(20),     author varchar(20),        primary
key(book_isbn));    desc textbook;


create table book_adoption(
courseno int,        sem int,
        book_isbn int,
        primary key(courseno,book_isbn),
        foreign key(courseno) references course(courseno),
        foreign key(book_isbn) references textbook(book_isbn));
desc book_adoption;


insert into student values('1BM11CS001','A','Sr','19931230');
insert into student values('1BM11CS002','B','Sr','19930924');    insert
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into student values('1BM11CS003','C','Sr','19931127');   insert into

student values('1BM11CS004','D','Sr','19930413');   insert into

student values('1BM11CS005','E','Jr','19940824');

commit;

select * from student;

regno	name	major	bdate
1BM11CS001	A	Sr	1993-12-30
1BM11CS002	B	Sr	1993-09-24
1BM11CS003	C	Sr	1993-11-27
1BM11CS004	D	Sr	1993-04-13
1BM11CS005	E	Jr	1994-08-24
NULL	NULL	NULL	NULL

insert into course values(111,'OS','CSE');

insert into course values(112,'EC','ECE');   insert

into course values(113,'SS','ISE');   insert into

course values(114,'DBMS','CSE');   insert into

course values(115,'SIGNALS','ECE'); commit; select *

from course;

courseno	cname	dept
111	OS	CSE
112	EC	ECE
113	SS	ISE
114	DBMS	CSE
115	SIGNALS	ECE
NULL	NULL	NULL

insert into textbook values(10,'DATABASE SYSTEMS','PEARSON','SCHIELD');

insert into textbook values(900,'OPERATING SYSTEMS','PEARSON','LELAND');

insert into textbook values(901,'CIRCUITS','HALL INDIA','BOB');

insert into textbook values(902,'SYSTEM SOFTWARE','PETERSON','JACOB');

insert into textbook values(903,'SCHEDULING','PEARSON','PATIL');

insert into textbook values(904,'DATABASE SYSTEMS','PEARSON','JACOB');

insert into textbook values(905,'DATABASE MANAGER','PEARSON','BOB');

insert into textbook values(906,'SIGNALS','HALL INDIA','SUMIT');

commit;

select * from textbook;

book_isbn	book_title	publisher	author
10	DATABASE SYSTEMS	PEARSON	SCHIELD
900	OPERATING SYSTEMS	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
NULL	NULL	NULL	NULL

insert into enroll values('1BM11CS001',115,3,100);

insert into enroll values('1BM11CS002',114,5,100);

insert into enroll values('1BM11CS003',113,5,100);

```sql
insert into enroll values('1BM11CS004',111,5,100);

insert into enroll values('1BM11CS005',112,3,100);

commit;

select * from enroll;
```

regno	courseno	sem	marks
1BM11CS001	115	3	100
1BM11CS002	114	5	100
1BM11CS003	113	5	100
1BM11CS004	111	5	100
1BM11CS005	112	3	100
NULL	NULL	NULL	NULL

```sql
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);

commit;

select * from book_adoption;
```

courseno	sem	book_isbn
111	5	900
111	5	903
111	5	904
112	3	901
113	3	10
113	5	902
114	5	905
115	3	906
NULL	NULL	NULL

Additional Queries:

insert into textbook values(908,'UNIX CONCEPTS','TATA MCGRAW HILL','SUMITABHA DAS');

insert into book_adoption values(113,4,908);

select * from textbook; select * from

book_adoption;

book_isbn	book_title	publisher	author
10	DATABASE SYSTEMS	PEARSON	SCHIELD
900	OPERATING SYSTEMS	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
908	UNIX CONCEPTS	TATA MCGRAW HILL	SUMITABHA DAS
NULL	NULL	NULL	NULL

courseno	sem	book_isbn
111	5	900
111	5	903
111	5	904
112	3	901
113	3	10
113	5	902
113	4	908
114	5	905
115	3	906
NULL	NULL	NULL

select c.courseno,t.book_isbn,t.book_title

from course c,book_adoption ba,textbook 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;

courseno	book_isbn	book_title
111	904	DATABASE SYSTEMS
111	900	OPERATING SYSTEMS
111	903	SCHEDULING

```sql
select distinct c.dept    from course c
where c.dept in(select c.dept    from
course c,book_adoption b,textbook 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,textbook t    where
c.courseno=b.courseno    and
t.book_isbn=b.book_isbn    and t.publisher
!= 'PEARSON');
```
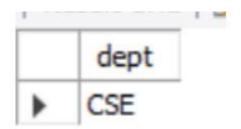
	dept
▶	CSE

author_name	book_id
navathe	1
navathe	2
edward angel	4
galvin	5
NULL	NULL

no_of_copies	book_id	branch_id
10	1	10
5	1	11
2	2	12
5	2	13
3	4	11
1	5	10
NULL	NULL	NULL

date_out	due_date	book_id	branch_id	card_no
2001-01-17	2001-06-17	1	10	101
2012-08-17	2012-08-17	1	11	104
2021-02-17	2021-04-17	2	13	101
2015-03-17	2015-07-17	4	11	101
NULL	NULL	NULL	NULL	NULL

create view partition select pub_year from book; select
* from partition;

	pub_year
▶	01-2017
	06-2016
	09-2015
	05-2016

create view q5_view as select b.book_id, b.title, bc.no_of_copies from book b, book_copies bc where b.book_id = bc.book_id;   select * from q5_view;

	book_id	title	no_of_copies
▶	1	dbms	10
	1	dbms	5
	2	adbms	2
	2	adbms	5
	4	cg	3
	5	os	1