```sql
create database student_faculty;

use student_faculty;

SET SQL_SAFE_UPDATES=0;


create table Student(
    snum integer,
    sname varchar(30),
    major varchar(30),
    lvl varchar(30),
    age integer, primary key(snum));


create table Faculty(
    fid integer,
    fname varchar(30),
    deptid integer,
    primary key(fid));


create table Class(
    cname varchar(30),
    meetat time,
    room varchar(30),
    fid integer,
    primary key(cname),
    foreign key(fid) references Faculty(fid));
```

```sql
create table Enrolled(
    snum integer,
    cname varchar(30),
    foreign key(snum) references Student(snum),
    foreign key(cname) references Class(cname));
    SELECT * FROM STUDENTS;
    drop table enrolled;

    DELETE FROM STUDENT;

insert into Student values(01, 'soundarya', 'CSE', 'SR', 20);
insert into Student values(02, 'lucy', 'CSE', 'SR', 20);
insert into Student values(03, 'aria', 'CSE', 'JR', 19);
insert into Student values(04, 'mona', 'CSE', 'SR', 20);
insert into Student values(05, 'EMILY', 'CSE', 'JR', 19);
insert into Student values(06, 'RITA', 'CSE', 'FR', 18);
insert into Student values(07, 'rupa', 'CSE', 'FR', 18);
insert into Student values(08, 'latha', 'CSE', 'FR', 18);
insert into Student values(11, 'reena', 'CSE', 'FR', 18);
insert into Student values(12, 'teena', 'CSE', 'FR', 18);
insert into Student values(13, 'meena', 'CSE', 'FR', 18);

insert into Faculty values(101, 'Selina', 10);
insert into Faculty values(102, 'latha', 20);
insert into Faculty values(131, 'rekha', 20);
```

```sql
insert into Class values('4a', '12:00:00', 406, 101);

insert into Class values('4b', '11:00:00', 407, 101);

insert into Class values('4c', '01:00:00', 410, 102);

insert into Class values('4d', '11:00:00', 406, 102);

insert into Class values('4e', '11:00:00', 408, 131);

insert into Class values('4f', '09:00:00', 409, 131);


insert into Enrolled values(01, '4a');

insert into Enrolled values(02, '4a');

insert into Enrolled values(03, '4b');

insert into Enrolled values(04, '4b');

insert into Enrolled values(05, '4c');

insert into Enrolled values(06, '4c');

insert into Enrolled values(07, '4d');

insert into Enrolled values(07, '4d');

insert into Enrolled values(08, '4e');

insert into Enrolled values(08, '4b');

insert into Enrolled values(11, '4a');

insert into Enrolled values(12, '4a');

insert into Enrolled values(13, '4a');


select sname from student s join enrolled e on s.snum=e.snum where s.lvl='JR'
and e.cname in

(select c.cname from class c join faculty f on f.fid=c.fid and f.fname='selina');
```

select distinct sname,e.cname from student s join enrolled e on s.snum=e.snum where e.cname in

(select c.cname from enrolled f ,class c join class d on c.meetat=d.meetat where e.cname!=f.cname and e.snum=f.snum);

select fname from faculty f join class c on f.fid=c.fid join class s on s.room=c.room and c.fid!=s.fid;

select distinct e.cname,f.fname,count(e.cname) from faculty f join class c on f.fid=c.fid join enrolled e on c.cname=e.cname

 group by e.cname having count(e.cname)<5;

select cname,count(cname) from enrolled group by cname;

SELECT S.age,S.lvl FROM student S GROUP BY S.age,S.lvl HAVING S.lvl IN

(SELECT S1.lvl FROM student S1 WHERE S1.age=S.age GROUP BY S1.lvl,S1.age HAVING COUNT(lvl)>=ALL

(SELECT COUNT(lvl) FROM student S2 WHERE S1.age=S2.age GROUP BY S2.lvl,S2.age));

TABLES:

```
  92 •     select * from student;
<
Result Grid | 田  ⟷  Filter Rows:
```

snum	sname	major	lvl	age
1	soun...	CSE	SR	20
2	lucy	CSE	SR	20
3	aria	CSE	JR	19
4	mona	CSE	SR	20
5	EMILY	CSE	JR	19
6	RITA	CSE	FR	18
7	rupa	CSE	FR	18
8	latha	CSE	FR	18
11	reena	CSE	FR	18

```
92 •    select * from class;
```

Result Grid | Filter Rows:

cname	meetat	room	fid
4a	12:00:00	406	101
4b	11:00:00	407	101
4c	01:00:00	410	102
4d	11:00:00	406	102
4e	11:00:00	408	131
4f	09:00:00	409	131
NULL	NULL	NULL	NULL

```
92 •    select * from faculty;
```

Result Grid | Filter Rows:

fid	fname	deptid
101	Selina	10
102	latha	20
131	rekha	20
NULL	NULL	NULL

```
91
92 •    select * from enrolled;
```

Result Grid | Filter Rows:

snum	cname
1	4a
2	4a
3	4b
4	4b
5	4c
6	4c
7	4d
7	4d
8	4e

QUERY OUTPUTS:

1.

```
67 •   select sname from student s join enrolled e on s.snum=e.snum where s.lvl='JR' and e.cname in
68     (select c.cname from class c join faculty f on f.fid=c.fid and f.fname='selina');
```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:

sname
aria

2.

```
71 •   select distinct sname,e.cname from student s join enrolled e on s.snum=e.snum where  e.cname in
72     (select c.cname from enrolled f ,class c  join class d on c.meetat=d.meetat where e.cname!=f.cname and e.snum=f.snum);
```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:

sname	cname
latha	4b
latha	4e

3.

```
74 •   select fname from faculty f join class c on f.fid=c.fid join class s on s.room=c.room and c.fid!=s.fid;
75
76
```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:

fname
Selina
latha

4.

```
83 •    select distinct e.cname,f.fname,count(e.cname) from faculty f join class c on f.fid=c.fid join enrolled e on c.cname=e.cname
84      group by e.cname having count(e.cname)<5;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: ⨵

cname	fname	count(e.cname)
4b	Selina	3
4c	latha	2
4d	latha	2
4e	rekha	1

Result 30 ✕

5.

```
88 •    SELECT S.age,S.lvl FROM student S GROUP BY S.age,S.lvl HAVING S.lvl IN
89 ⊖    (SELECT S1.lvl FROM student S1 WHERE S1.age=S.age  GROUP BY S1.lvl,S1.age HAVING COUNT(lvl)>=ALL
90      (SELECT COUNT(lvl) FROM student S2 WHERE S1.age=S2.age GROUP BY S2.lvl,S2.age));
91
92
93      |
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: ⨵

age	lvl
18	FR
19	JR
20	SR