TABLES:

1. student

Table

Description automatically generated

1. faculty

Table

Description automatically generated

1. class

Graphical user interface, text, application

Description automatically generated

1. enrolled

A picture containing table

Description automatically generated

QUERIES:

1. Find the names of all Juniors (level = JR) who are enrolled in a class taught by ‘Harish’

select distinct S.sname from student S, class C, enrolled E, faculty F where S.snum = E.snum and E.cname = C.cname and C.fid = F.fid and F.fname = 'Harish' and S.lvl = 'Jr';

Table

Description automatically generated

1. Find the names of all classes that either meet in room R128 or have five or more Students enrolled.

select C.cname from class C where C.room ='R128' or C.cname in (select E.cname from enrolled E group by E.cname having count(\*)>=5);

Graphical user interface, table

Description automatically generated

1. Find the names of all students who are enrolled in two classes that meet at the same time.

select distinct S.sname from student S where S.snum in (select E1.snum from enrolled E1, enrolled E2, class C1, class C2 where E1.snum = E2.snum and E1.cname != E2.cname and E1.cname = C1.cname and E2.cname = C2.cname and C1.meets\_at = C2.meets\_at);

Table

Description automatically generated with medium confidence

1. Find the names of faculty members who teach in every room in which some class is taught.

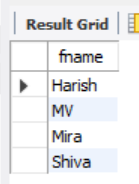
select f.fname,f.fid from faculty f where f.fid in (select fid from class group by fid having count(\*)=(select count(distinct room) from class) );

Graphical user interface, application, table

Description automatically generated

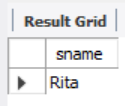
1. Find the names of faculty members for whom the combined enrollment of the courses that they teach is less than five.

select distinct F.fname from faculty F where 5 > (select count(E.snum) from class C,enrolled E where C.cname = E.cname and C.fid = F.fid);



1. Find the names of students who are not enrolled in any class.

select distinct S.sname from student S where S.snum not in (select E.snum from enrolled E);



1. For each age value that appears in Students, find the level value that appears most often. For example, if there are more FR level students aged 18 than SR, JR, or SO students aged 18, you should print the pair (18, FR).

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(\*) >= all (select count(\*) from student S2 where S1.age = S2.age group by S2.lvl,S2.age));

Table

Description automatically generated