PROGRAM 4:STUDENT FACULTY DATABASE

Consider the following database for student enrolment for course:

STUDENT (snum: integer, sname: string, major: string, level: string, age: integer)

CLASS (name: string, meets at: time, room: string, fid: integer)

ENROLLED (snum: integer, cname: string)

FACULTY (fid: integer, fname: string, deptid: integer)

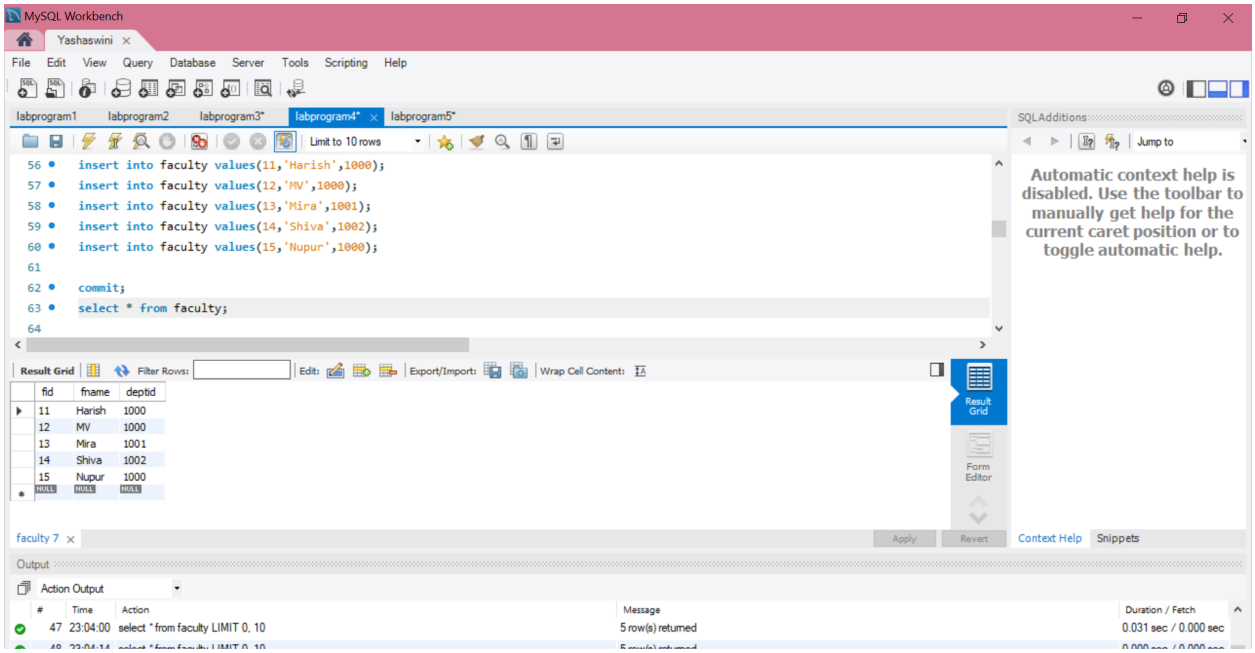
The meaning of these relations is straightforward; for example, Enrolled has one record per student-class pair

such that the student is enrolled in the class. Level is a two character code with 4 different values (example: Junior: JR etc)

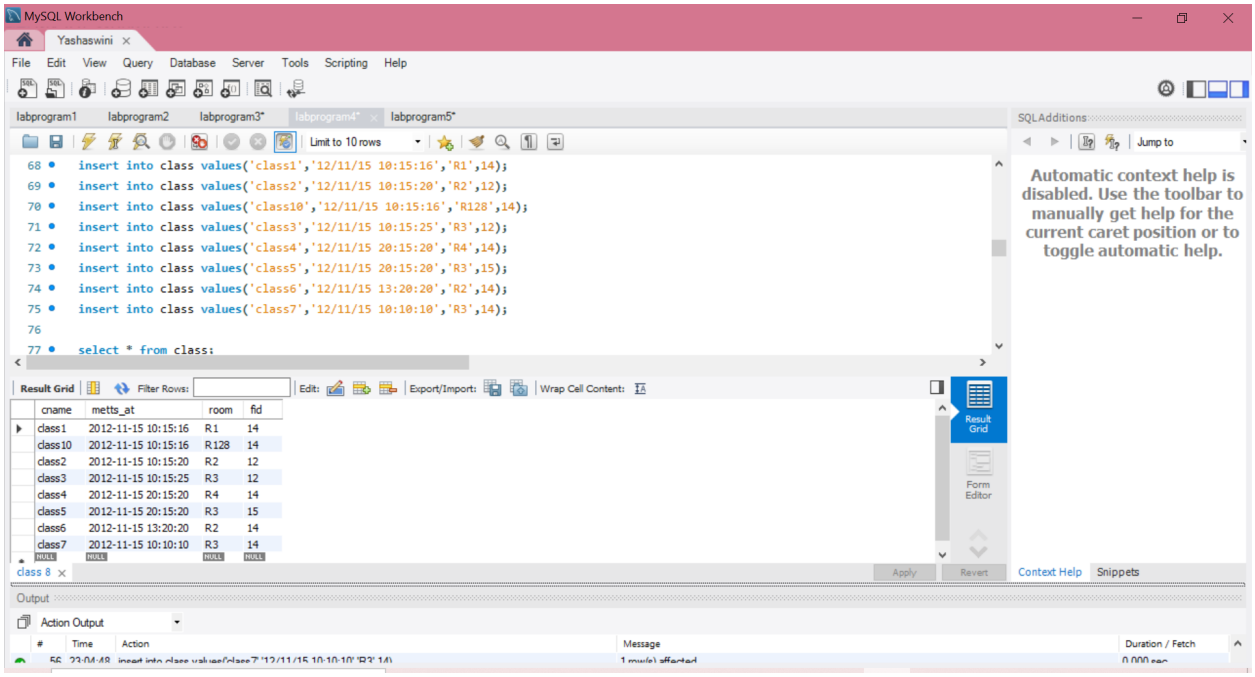
Write the following queries in SQL.

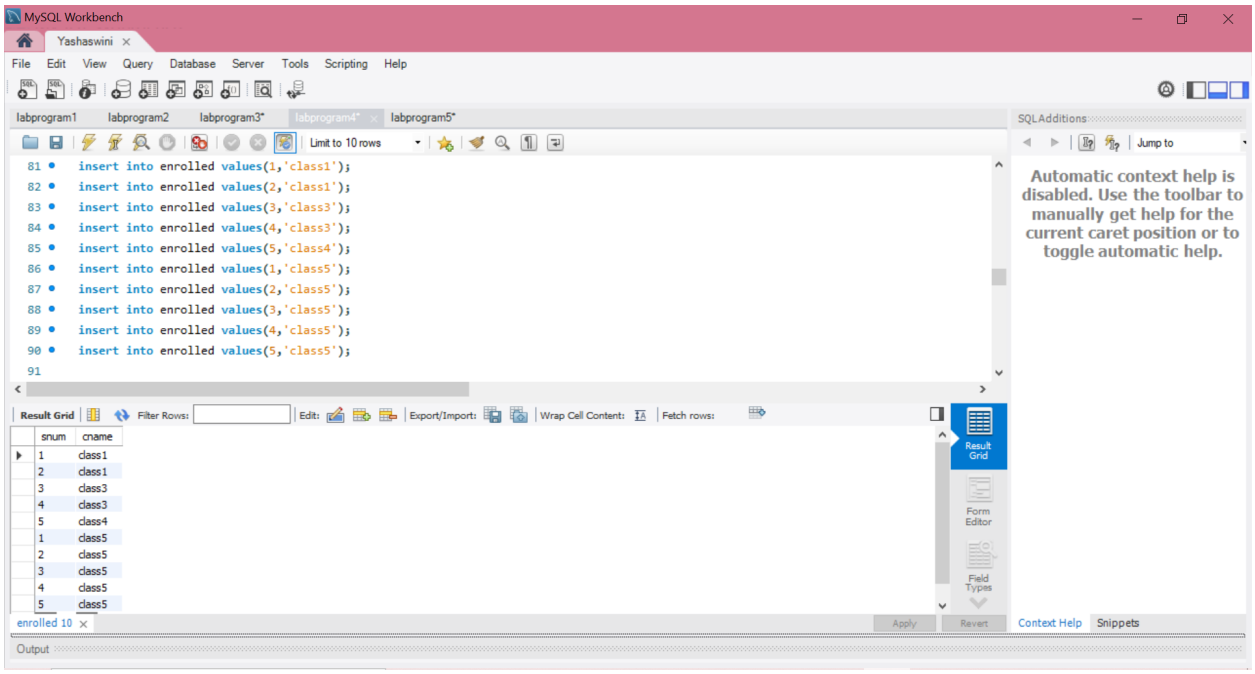
No duplicates should be printed in any of the answers.

STUDENT TABLE

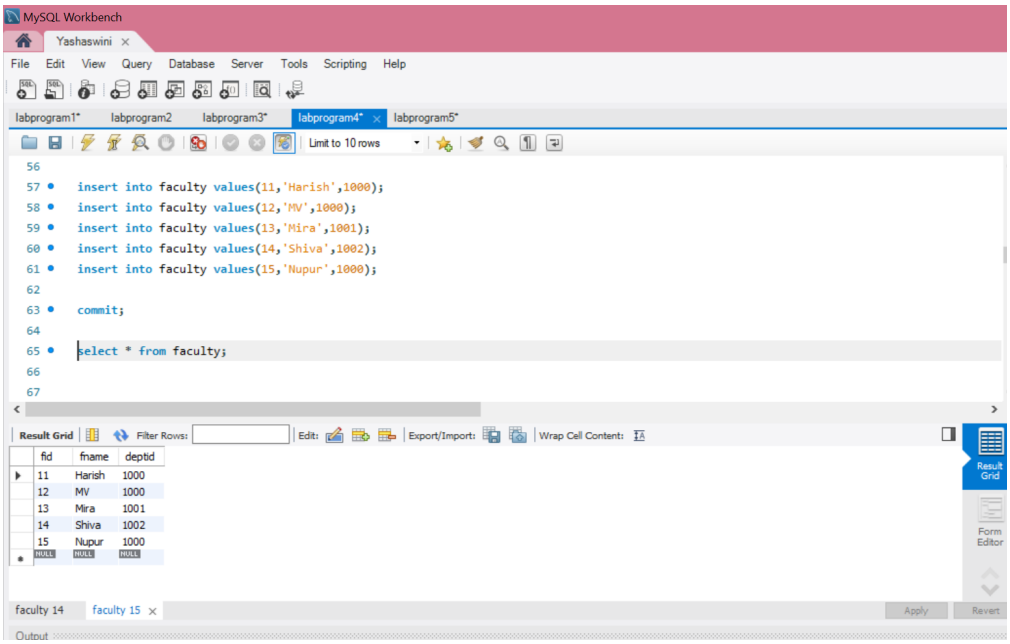


CLASS TABLE

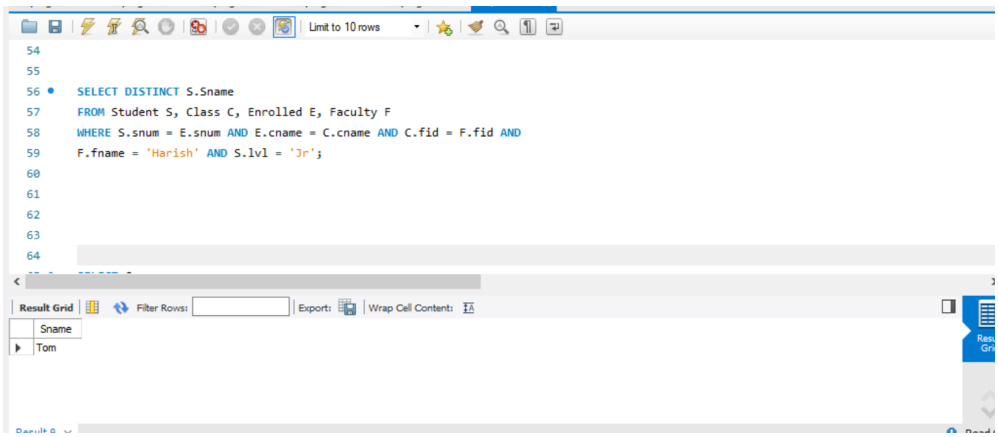

MySQL Workbench
Yashaswini
File Edit View Query Database Server Tools Scripting Help
labprogram1 labprogram2 labprogram3* labprogram4* labprogram5*
Limit to 10 rows
68 insert into class values('class1','12/11/15 10:15:16','R1',14);
69 insert into class values('class2','12/11/15 10:15:20','R2',12);
70 insert into class values('class10','12/11/15 10:15:16','R128',14);
71 insert into class values('class3','12/11/15 10:15:25','R3',12);
72 insert into class values('class4','12/11/15 20:15:20','R4',14);
73 insert into class values('class5','12/11/15 20:15:20','R3',15);
74 insert into class values('class6','12/11/15 13:20:20','R2',14);
75 insert into class values('class7','12/11/15 10:10:10','R3',14);
76
77 select * from class;
Result Grid Filter Rows: Edit: Export/Import: Wrap Cell Content:
cname metts_at room fid
class1 2012-11-15 10:15:16 R1 14
class10 2012-11-15 10:15:16 R128 14
class2 2012-11-15 10:15:20 R2 12
class3 2012-11-15 10:15:25 R3 12
class4 2012-11-15 20:15:20 R4 14
class5 2012-11-15 20:15:20 R3 15
class6 2012-11-15 13:20:20 R2 14
class7 2012-11-15 10:10:10 R3 14
SQL Additions
Jump to
Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.
Result Grid
Form Editor
Apply Revert
Context Help Snippets
class 8
Output
Action Output
Time Action Message Duration / Fetch


MySQL Workbench
Yashaswini
File Edit View Query Database Server Tools Scripting Help
labprogram1 labprogram2 labprogram3* labprogram4* labprogram5*
Limit to 10 rows
81 insert into enrolled values(1,'class1');
82 insert into enrolled values(2,'class1');
83 insert into enrolled values(3,'class3');
84 insert into enrolled values(4,'class3');
85 insert into enrolled values(5,'class4');
86 insert into enrolled values(1,'class5');
87 insert into enrolled values(2,'class5');
88 insert into enrolled values(3,'class5');
89 insert into enrolled values(4,'class5');
90 insert into enrolled values(5,'class5');
91
Result Grid Filter Rows: Edit: Export/Import: Wrap Cell Content: Fetch rows:
snum cname
1 class1
2 class1
3 class3
4 class3
5 class4
1 class5
2 class5
3 class5
4 class5
5 class5
SQL Additions
Jump to
Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.
Result Grid
Form Editor
Field Types
Apply Revert
Context Help Snippets
enrolled 10
Output

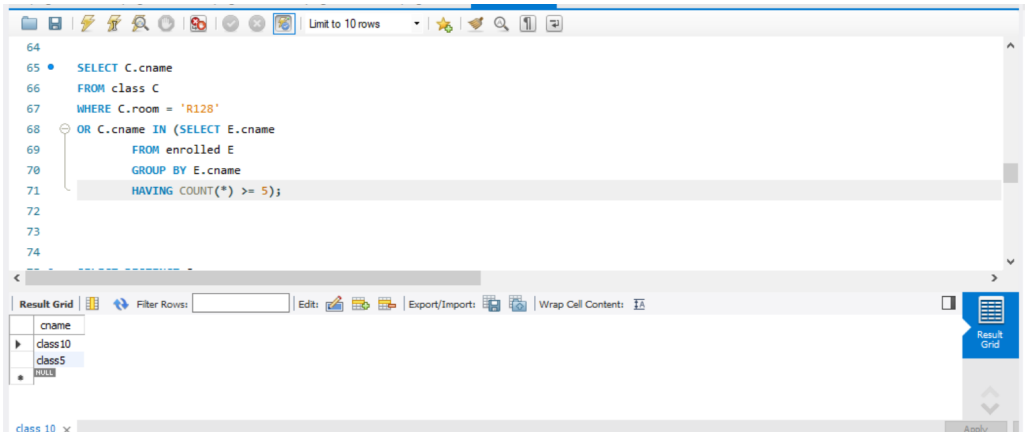
FACULTY TABLE



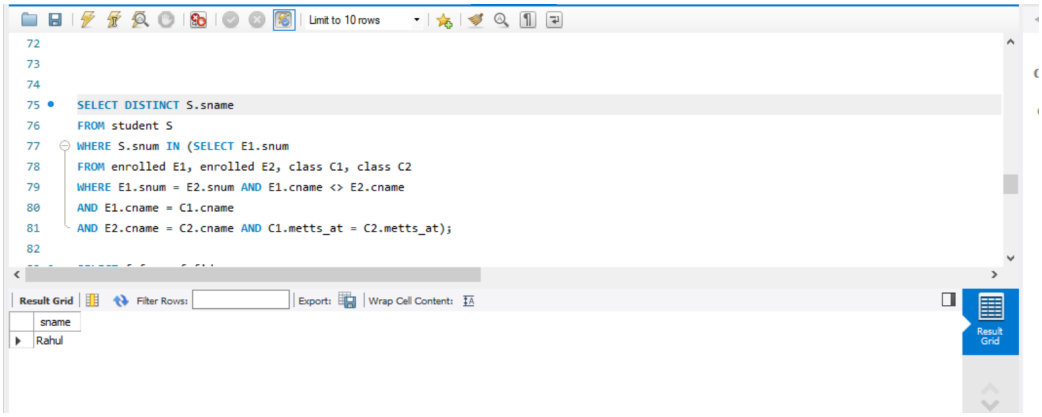
i. Find the names of all Juniors (level = JR) who are enrolled in a class taught by



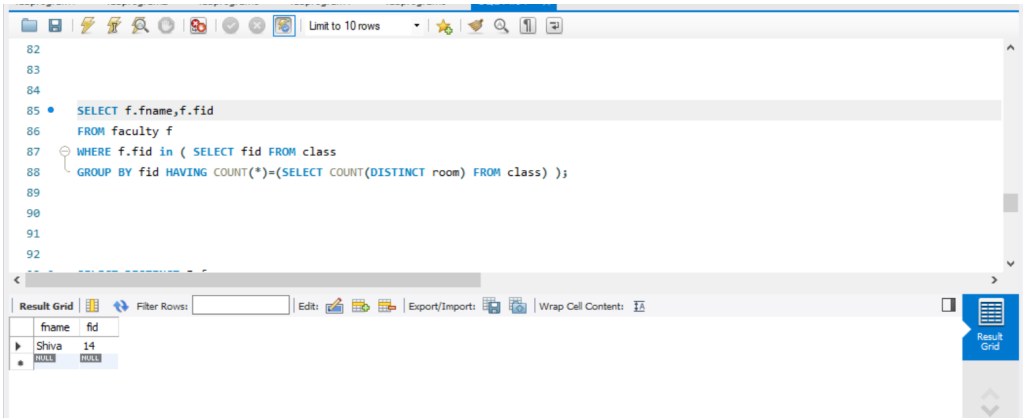
ii. Find the names of all classes that either meet in room R128 or have five or more Students enrolled.



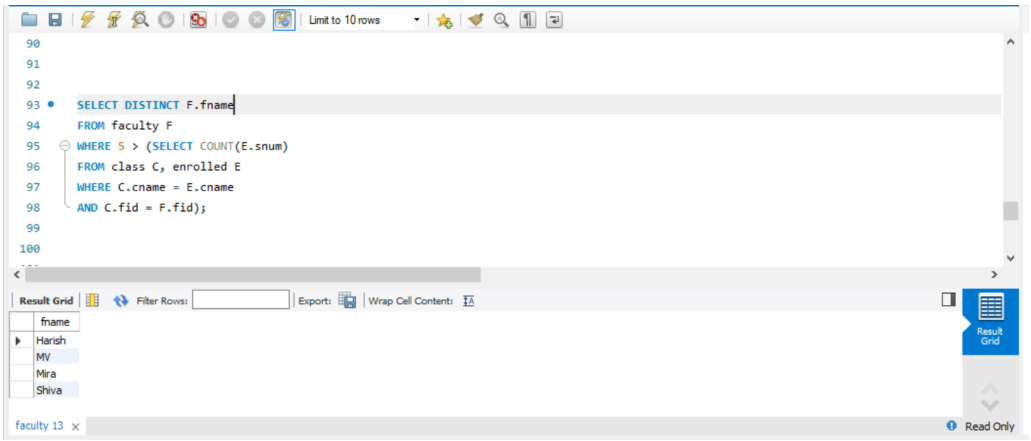
iii. Find the names of all students who are enrolled in two classes that meet at the same time.



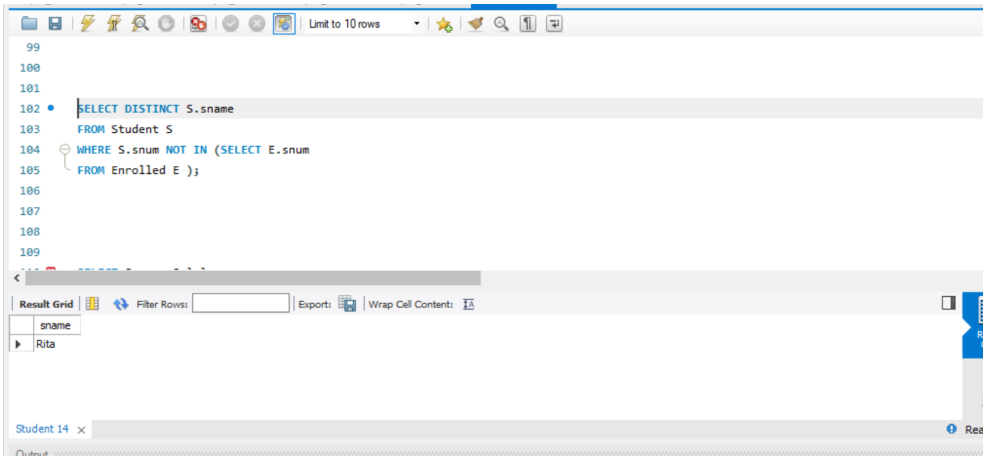
iv. Find the names of faculty members who teach in every room in which some class is taught.



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



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



vii. 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).