

Practical -6

Group BY and Having Cluse MySQL

Exercise

create table for following

student (sid,name) sid primary key

subject (subid,sname) subid is primary key

stud_sub (sid,subid,teachername,marks) primary key(sid,subid).

Sid is foreign key from references student(sid)

Subid is foreign key from references subject(subid).

->Create table Student(sid varchar(20) primary key,name varchar(30));

->Create table Subject(subid varchar(20)Primary key, sname varchar(30));

->Create table stud_sub(sid varchar(20),subid varchar(30),teachername varchar(30),marks int, primary key (sid, subid), foreign key (sid) references Student(sid), foreign key (subid) references Subject(subid));

Inserting Data

1. Insert into Student(sid,name) value

(1,'Simon'),(2,'Alvin'),(3,'vidya'),(4,'rohit'),(5,'Kaushik'),(6,'reema');

2.Insert into Subject(subid,sname) values

(1,'CONSM'),(2,'DBMS'),(3,'Physics'),(4,'Maths'),(5,'Biology');

3.Insert into stud_sub(sid,subid,teachername,marks) values (1,1,'Reshma',32),

(1,2,'Vihar',50),(1,3,'Bhavik',55),(2,1,'Jigar',64),(2,1,'Jigar',64),(2,2,'kamlesh',68),
(2,3,'suhana',72),(2,4,'Reshma',59),(2,5,'Vihar',71),(3,1,'Jigar',65),(3,2,'Bhavik',66),
(3,3,'suhana',54),(4,1,'Vihar',81),(4,4,'suhana',64),(4,5,'Jigar',64),(5,2,'kamlesh',70),
(5,3,'Reshma',56),(6,1,'Bhavik',76),(6,4,'Jigar',68);

Perfrom following query based on given table data

1. count number of students who has join the subject physics.

Hint :: not required group by . use count() aggregate function.

->Select count (sid) as No_of_students from stud_sub where subid=3;

2. Find the maximum mark of student id =1 .

->Select max(marks) from stud_sub where sid=1;

3. Find the maximum marks for each subject. (hint : use group by)

Display maximum mark and subid both.

->->Select max(marks),subid from stud_sub group by subid;

4. Find maximum marks of each students.

Display maximum marks and subid, studentid. (hint : group by sid)

->->Select max(marks),sid from stud_sub group by sid;

5 .Find the total marks for each subject.

->Select sum(marks),subid from stud_sub group by subid;

6. Find number of students enrolled in each subject .

->Select count(sid) as No_of_students,subid from stud_sub group by subid;

7. display subjectid and total marks whose total marks is grather than 300.(hint : groupby and having)

->Select sum(marks) as total_marks,subid from stud_sub group by subid having sum(marks)>300;

8. display subject name whose total marks is grater than 300.(hint : group by ,having and subquery)

->Select sname from subject where subid IN(select subid from stud_sub group by subid having sum(marks)>300);

9. display total number of students and teacername each teacherwise. (hint group by)

->Select sum(sid),teachername from stud_sub group by teachername;

10. display teacher name who is teaching more than 3 students (hint : group by , having)

->Select sum(sid),teachername from stud_sub group by teachername having sum(sid)>3;

11. display teachers name who is teaching subject DBMS (hint subquery)

->Select teachername from stud_sub where subid IN(Select subid from subject where subid=2);

12. display each subject , display the student name who got maximum mark.

(display subjected and studentname)

->Select name from student where sid IN(Select sid from stud_sub group by subid);

13. display number of subject teach by each teacher.

->Select count(subid),teachername from stud_sub group by teachername;

14.display only those teacher who is teach more than 2 subject. (hint group by,having).

->Select distinct teachername from stud_sub where subid IN(Select subid from stud_sub group by subid having count (subid));

15. display those subject name which is teach by more than 2 teacher. (hint : group by , having,subquery)

->Select sname from subject where subid IN(Select subid from stud_sub groupby subid having count(teachername)>2);

16. Find out the total marks of student vidya.

->Select sum(marks) as total_marks,sid from stud_sub group by sid having sid=1;

17. Display the teacher name who has given total marks is more than 180.(hint groupby,having)

->Select teachername from stud_sub group by teachername having sum(marks)>180;