Create table mytable3

(id int primary key

Name varchar(20));

To add not null constraint

- Adding not null constraint will be allowed if the table is empty, otherwise, initially add the column, then update values and then modify column to add not null constraint.

Create table mytable3

Add mobile int not null

To add unique constraint

Create table mytable3

Add column address(20)

If the table constains data then to add unique constraints, existing values should satisfy the unique constraint

Alter table mytable3

Add constraint un unique(address)

Types of joins

1. Cross join
2. Inner join
    a. Equijoin
        i. If join condition is based on = sign then it is called as equijoin
    b. Non equi join
        i. If the join condition is based on not equal to operator
    c. Self join
3. Outer join--- if we want to display matching as well as non matching rows then use outer join
    a. Left outer --→ to get matching and nonmatching rows from left side table, then use left outer join
    b. Right outer-→ to get matching and nonmatching rows from right side table, then use right outer join

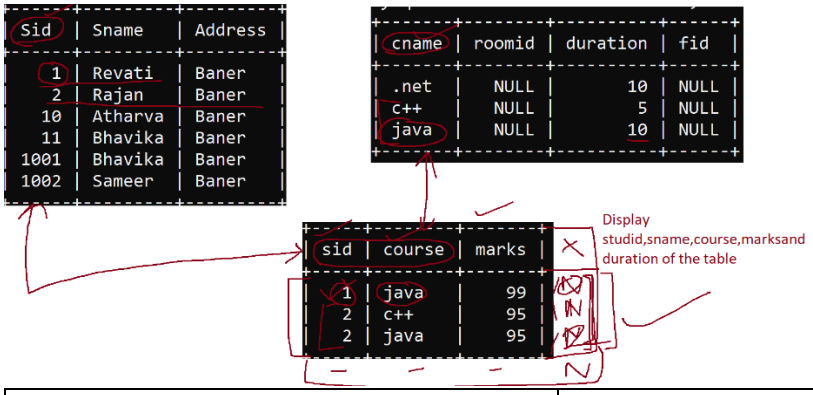
    c. Full outer-→ to get matching and nonmatching rows from both side table, then use full outer join

Emp(empid,ename,sal,job,deptno)

Dept(deptno,dname,loc)

1. To find sid,name,marks and duration of all the courses
   select *

from student s, stud_marks sm,coursedata c
where s.sid=sm.sid and sm.course=c.cname;



2. To find the marks and duration of all courses for which Rajan appeared.
   select *
   -> from student s, stud_marks sm,coursedata c
   -> where s.sid=sm.sid and sm.course=c.cname and sname='Rajan';
   3. To display empno,name,sal,deptno,grade and dname for all employees
   Select empno,ename,sal,e. deptno,grade,dname
   From emp e,dept d, salgrade s
   Where e.deptno=d.deptno and e.sal between s.losal and s.hisal

3. To display empno,name,sal,deptno,grade and dname for all employees who are working in either sales department or purchase dept

Select empno,ename,sal,e. deptno,grade,dname

From emp e,dept d, salgrade s

Where e.deptno=d.deptno and e.sal between s.losal and s.hisal and dname in ('sales','purchase')

4. To display empno,name,sal,deptno,grade and dname for all employees who are working in either sales department or Accounting dept and sal >2000

Select empno,ename,sal,e. deptno,grade,dname

From emp e,dept d, salgrade s

Where e.deptno=d.deptno and e.sal between s.losal and s.hisal and dname in ('sales','accounting') and e.sal>2000

5. To find empno,ename,sal,mgrno mnager name,manager sal

Select e.empno,e.ename,e.sal,e.mgr "managerno",m.ename "manager name",m.sal "manager sal" From emp e, emp m Where e.mgr=m.empno	Select e.empno,e.ename,e.sal,e.mgr "managerno",m.ename "manager name",m.sal "manager sal" From emp e inner join emp m on e.mgr=m.empno

6. Display empno,ename,sal,dname for all employees

Select empno,ename,sal,dname From emp e,dept d Where e.deptno=d.deptno	Select empno,ename,sal,dname From emp e inner join dept d on e.deptno=d.deptno

1. Display empno,ename,sal,dname for all employees , and also display departments in which no employees are there
   Select empno,ename,sal,dname
   From emp e right join dept d on e.deptno=d.deptno;

2. Display empno,ename,sal,dname for all employees , and also display employees for whom no department is assigned.
   Select empno,ename,sal,dname
   From emp e left join dept d on e.deptno=d.deptno;

3. Display empno,ename,sal,dname for all employees , and also display employees for whom no department is assigned. And also display dept in which no employees are there
   Rule for union --→ to use union both queries should have same number of columns
   Corresponding columns data type should match

Select empno,ename,sal,dname

From emp e left join dept d on e.deptno=d.deptno

union

Select empno,ename,sal,dname

From emp e right join dept d on e.deptno=d.deptno;

To take full join of 3 tables in mysql

1. In mysql full join operator does not exists
2. So to take full join of 2 tables
   a. Take left join of 2 tables
   b. Take right join of 2 table
   c. Do union of 2 queries
3. To take full outer join of 3 tables
   a. Take left join of all 3 tables ------step a
   b. Take right join of 2 table add filter condition
      where <some column from leftside table> is null
   c. Add dummy columns to match number of columns of the query executed in step -a
   d. And take union of these 2 queries

Faculty table

Fid	Fname	skills
1	X	Java
2	y	C++
3	Z	.net

Room table

Roomid	Rname	location
10	Mogra	First floor
20	Lotus	First floor
30	Jasmin	Second floor

Course

Courseid	Cname	Std_count	rid	fid
1	DAC	240	10	1
2	DBDA	60		
3	DTISS	50	20	

o/p of query

From faculty f left join course c on c.fid=f.fid left join room r on r.roomid=c.rid

Courseid	Cname	Std_count	rid	fid	fid	fname	skill	Rid	Rname	location
1	DAC	240	10	1	1	X	Java	10	Mogra	First floor
					2	y	C++			
					3	Z	.net			

o/p

Courseid	Cname	Std_count	rid	fid	**null**	null	null	roomid	rname	location
								20	Lotus	First floor
								30	Jasmin	Second floor

From faculty f left join course c on c.fid=f.fid left join room r on r.roomid=c.rid

From course c right join room r
Where c.cid is null

1. Display cname,fname,rname which are assigned to courses also display faculties who are not assigned to courses also display rooms which are not assigned to the courses
   Select cname,fname,rname
   From faculty f left join course c on c.fid=f.fid left join room r on c.rid=r.roomid
   union
   Select cname,null,rname

From course c right join room r on c.rid=r.roomid
Where c.cname is null;

2. Display cname,fname which are assigned to courses also display faculties who are not assigned to courses also display courses for which no faculties are assigned

   Select c.cname,f.fname

   From course c left join faculty f on c.fid=f.fid

   Union

   Select c.cname,f.fname

   From course c right join faculty f on c.fid=f.fid

3. Display all courses and rooms which are assigned to courses and also display rooms which are available.
   Select c.cname,r.rname,r.roomid
   From course c right join room r on c.rid=r.roomid

4. Display all cname and faculties allocated tot the course, also display faculties who are not assigned to any course

Select cname,f.fid,f.fname From course c right join faculty f on c.fid=f.fid

5. Display course name and faculty name allocated to the course

Select c.cname,f.fname From course c inner join faculty f on c.fid=f.fid	Select c.cname,f.fname From course c , faculty f where c.fid=f.fid

6. Display all coursename and rname allocated to course

Select c.cname,r.rname From course c inner join room r on c.rid=r.roomid	Select c.cname,r.rname From course c , room r Where c.rid=r.roomid

7. Display courseid, course name, rname,faculty name

Select c.courseid,c.cname,r.rname,f.fname From course c inner join room r on c.rid=r.roomid inner join faculty f on c.fid=f.fid	Select c.courseid,c.cname,r.rname,f.fname From course c , room r, faculty f c.fid=f.fid Wheren c.rid=r.roomid and c.fid=f.fid