**JOINS**

create table department

( did int primary key ,

department\_name varchar (20) ,

department\_head varchar (20) ) ;

desc department ;

insert into department

( did , department\_name , department\_head )

values

( 1 , 'hr' , 'amit' ) ,

( 2 , 'trainer ' ,'sumit ' ) ,

( 3 , 'accounts ' , 'pranit ' ) ,

( 4 , 'it' , 'pratik' ) ,

( 5 , 'infra ' ,'sunita ' );

select \* from department ;

drop table employee ;

create table employee

( eid int primary key ,

name varchar (20 ) ,

phone int unique ,

did int ,

constraint did\_fk foreign key(did)

references department(did) ) ;

insert into employee values

( 10 , 'raj' , '123' , 1 ) ,

( 11 , 'rani' , '456' ,2 ) ,

( 12 , 'rajat' ,'126' ,3 ) ,

(13 ,'aniket' ,'359' ,4 ) ,

(14 ,'john' , '128' , null );

select \* from employee ;

select \* from department;

-- inner join : to get common records from both table

-- SELECT column\_name\_from\_both\_table

-- FROM table1\_name

-- join\_name table2\_name

-- ON common\_column\_name

select eid,name,phone,department\_name,department\_head

from employee

inner join department

on employee.did = department.did;

-- left join : aal records from left table and matching record from right table

select eid,name,phone,department\_name,department\_head

from employee

left join department

on employee.did = department.did;

select eid,name,phone,department\_name,department\_head

from employee

right join department

on employee.did = department.did;

-- full outer join : there is no full outer join in mysql. but we can achive it by

-- taking unioun of left join and right join

select eid,name,phone,department\_name,department\_head

from employee

left join department

on employee.did = department.did

union

select eid,name,phone,department\_name,department\_head

from employee

right join department

on employee.did = department.did;

-- self join : when there is relation between entties is present inside same table, we have to use self join

-- ex : employee table. there are some employees who are manager

create table emp

( id int primary key ,

name varchar (20) ,

phone varchar (20) ,

manager\_id int ) ;

insert into emp values

( 1 , ' raj ', '123' , 3 ) ,

( 2 , 'rani' ,'456' , 3 ) ,

( 3 , 'punit' ,'126' , null ) ,

( 4 , 'aniket' , '359' , 1 ) ;

select \* from emp ;

select employeee.id, employeee.name as emp\_name, employeee.phone, manager.name as manager\_name

from emp employeee

join emp manager

on employeee.manager\_id = manager.id;

-- join with sorting and condition

select eid,name,phone,department\_name,department\_head

from employee

inner join department

on employee.did = department.did

order by name;

select eid,name,phone,department\_name,department\_head

from employee

inner join department

on employee.did = department.did

where phone in(123,359);

select eid,name,phone,department\_name,department\_head

from employee

inner join department

on employee.did = department.did

where phone in(123,359) order by name;