**SQL ASSIGNMENT(DATABASE:MYSQL)**

**Create database**

create database employeedatabase;

**Create Table query**

create table employee(

empid int,name varchar(50),

address varchar(200) not null,

dob date not null,

dateofjoining date not null,

gender varchar(10) not null,

mobileno varchar(10) unique,

deptid int,

primary key(empid)

);

create table department (

deptid int ,

location varchar(50),

name varchar(50) not null,

primary key(deptid)

);

create table project(

projectid int ,

location varchar(50),

name varchar(50),

deptid int,

primary key(projectid)

)

create table dependent(

dependentid int auto\_increment,

dname varchar(50) not null,

gender varchar(10) not null,

relationship varchar(20) not null,

empid int,

primary key(dependentid)

)

create table employeeWork( empid int ,projectid int ,hoursworked int ,foreign key (empid) references employee(empid),foreign key (projectid) references project(projectid) )

**Drop Table(dropped the table and then recreated because I needed this table)**

drop table dependent;

**Alter table**

alter table employee add constraint fk\_department\_employee foreign key(deptid) references department(deptid)

alter table project add constraint fk\_department\_project foreign key(deptid) references department(deptid)

alter table department add column managerid int,add column since date;

alter table department add constraint fk\_manager foreign key(managerid) references employee(empid)

ALTER TABLE dependent

ALTER gender SET DEFAULT 'other';

ALTER TABLE employee

ALTER gender SET DEFAULT 'other';

**Insert data into table**

insert into employee(empid,name,address,dob,dateofjoining,gender,mobileno,deptid)

value(1186,"Rani","Ganga building,povai","1980-04-01","2013-03-02","female","6255467890",1287,100000),

(2346,"Rahul","LDCV building ,near oberoi mall,goregaon","1997-01-10","2020-03-02","male","1226167890",9987,400000),

(8976,"Leela","omkar altamonte,malad","1976-05-10","2012-03-02","female","1789416780",8787,750000),

(2316,"Nilesh","Raheja tipco heights,dadar","1975-02-27","2011-08-12","male","1254152810",1287,500000),

(1986,"Rocky","Neela nivas,Hayderabad","1985-11-11","2009-04-02","male","1254177890",56747,50000),

(1888,"Reena","NKG building,Banglore","1981-01-10","2012-01-28","female","2264167890",9987,90000)

insert into department

values(1289,"Andheri","Marketing",1256,"2012-07-05"),

(1254,"Andheri","Finanace",1312,"2012-07-05"),

(9987,"Andheri","Sales",1888,"2012-07-05")

insert into project

values(9081,"Analysis of Satisfaction Level of Employees","Andheri",56747),

(6253,"Deterministic and Stochastic inventory models.","Andheri",1287),

(7568,"Facebook analytics of product","powai",8787),

(9087,"Studying the Home Loans Indian Banks Offer","Andheri",1254)

insert into employeework values(1126,6253,120),(1186,9081,200),(1256,9087,90),(1312,6253,100),(1126,6253,240),(2316,9087,400),(2346,7568,300),(1312,9081,380),(1888,6253,420),(1986,7568,160)

insert into dependent(dname,gender,relationship,empid)

values("Naresh","male","father",1126),

("Nehal","female","mother",1126),

("Suresh","male","father",1186),

("Ramesh","male","father",1256),

("Sneha","female","mother",1312),

("Vishal","male","faather",8976)

**Update Query:**

update employee set deptid=1254 where empid=1312

update employee set deptid=56747 where empid=1126

update department set managerid=2316 where deptid=1287

update department set managerid=1888 where deptid=9987

update department set managerid=1126 ,since ="2013-09-01" where deptid=56747

**Select queries(Where ,joins, group by, order by, union, group by, having, between, count, and/or):**

SELECT \* FROM employee where empid=1126;

SELECT \* FROM employee where gender="female" and deptid=1287;

SELECT \* FROM employee where deptid=9987 or deptid=1287;

SELECT \* FROM employee order by dob

SELECT salary FROM employee order by salary desc limit 4

SELECT \* from employee as e ,department as d where e.deptid=d.deptid;

SELECT \* from employee inner join dependent on employee.empid=dependent.empid;

SELECT \* from employee left join dependent on employee.empid=dependent.empid;

SELECT \* from employee right join dependent on employee.empid=dependent.empid;

select name from employee union select dname from dependent

select avg(salary) as avgsalary from employee

select \* from employee where dateofjoining between "2012-01-01" and "2012-12-31";

select department.name ,count(\*) from employee inner join department on employee.deptid=department.deptid group by employee.deptid;

select department.name ,count(\*) from employee inner join department on employee.deptid=department.deptid group by employee.deptid having count(\*)>1;

SELECT \* from employee cross join dependent

**Delete Query:**

delete from employee where empid=1112

**Stored Procedure:**

DELIMITER &&

CREATE DEFINER=`root`@`localhost` PROCEDURE `GetCurrentAgeOfEmployees`()

BEGIN

SELECT name, TIMESTAMPDIFF(year,employee.dob,curdate()) as age FROM employee;

END

DELIMITER ;

delimiter &&

CREATE PROCEDURE `GetEmployeesByDepartmentID`(IN deptid int )

BEGIN

SELECT \* from employee where employee.deptid=deptid;

END&&

delimiter ;

call GetEmployeesByDepartmentID(1254);

**Index:**

CREATE INDEX empid\_index

ON employee(empid);

**View queries:**

create view male\_employees as select \* from employee where gender="male";

**Prepared statement:**

PREPARE prepstmt FROM 'select \* from employee where deptid=?';

set @deptid=1254;

EXECUTE prepstmt USING @deptid;