

19b

```
create database q19;  
use q19;
```

```
create table Teacher(  
  Id int NOT NULL primary key,  
  Name varchar(255),  
  Address varchar(255),  
  dept varchar(255),  
  salary int );
```

-- ans 1

```
Insert into Teacher(Id,Name,Address,dept,salary) values  
(101,'A','pune','IT',100000),  
(102,'B','pune1','COMP',80000),  
(103,'C','pune','IT',25000),  
(104,'D','pune2','COMP',75000),  
(105,'E','pune','IT',10000);
```

```
SELECT * FROM Teacher;
```

-- ans2

```
select * from Teacher  
where Address='pune' && salary=25000;
```

-- ans3

```
select count(*) from Teacher  
where salary>75000
```

-- ans4

```
select  
((select sum(salary) from Teacher where dept='IT')  
/  
(select count(*) from Teacher where dept='IT') ) as average;
```

18,19a

```
create database q19a;  
use q19a;
```

```
create table Student(  
  rollno varchar(255) NOT NULL primary key,  
  Name varchar(255),  
  Address varchar(255));
```

```
create table Subject(  
sub_name varchar(255),  
sub_code int primary key);
```

```
create table Marks(  
rollno varchar(255) NOT NULL ,  
marks int,  
sub_code int ,  
foreign key(rollno)references Student(rollno),  
foreign key(sub_code)references Subject(sub_code));
```

-- ans 1

```
Insert into Student(rollno,Name,Address) values  
(101,'A','pune'),  
(102,'B','pune1'),  
(103,'C','pune'),  
(104,'D','pune2'),  
(105,'E','pune');
```

```
Insert into Subject(sub_name,sub_code) values  
(DBMS,123),  
(m3,125);
```

```
Insert into Marks(rollno,marks,sub_code) values  
(101,80,123),  
(101,40,125),  
(102,20,123),  
(103,35,123),  
(104,50,123),  
(105,100,123);
```

-- ans1

```
select avg(marks),Student.name from Marks  
INNER JOIN Student on Student.rollno = Marks.rollno  
group by Student.rollno
```

-- ans2

```
Select count(*) from Marks  
Where sub_code in (select sub_code from Subject WHERE sub_name='DBMS')  
&& marks<36
```

-- ans3

```
select marks,Student.name from Marks
```

INNER JOIN Student on Student.rollno = Marks.rollno
Where marks>75 || marks<40

-- ans 2 18

```
create table check_table(  
roll_no varchar(255) ,  
Checked varchar(255))
```

```
delimiter //  
create trigger check_rollno2  
after update  
on Student for each row  
BEGIN  
    IF NEW.rollno LIKE 'TE%' Then  
        Insert into check_table(roll_no,Checked)  
        value(NEW.rollno,'TRUE');  
    else  
        Insert into check_table(roll_no,Checked)  
        value(NEW.rollno,'FALSE');  
    END IF;  
end //
```

```
Update Student  
SET rollno='mE152'  
WHERE rollno = '103';
```

```
select * from student;  
select * from check_table;
```

17

16

Half done

15

```
create database q15;  
use q15;
```

```
create table employee(  
    person_name varchar(255),  
    street varchar(255),  
    city varchar(255));  
create table works(
```

```

    person_name varchar(255),
    company_name varchar(255),
    salary int);
create table company(
    company_name varchar(255),
    city varchar(255));
create table manages(
    person_name varchar(255),
    manager_name varchar(255));
insert into employee values
("A","s1","pune"),
("B","s1","pune"),
("C","s3","p2"),
("D","s","p2");

insert into company values("first bank","pune"),("csb bank","p2");
insert into works values ("A","first bank",20000),
("B","csb bank",20000),
("C","csb bank",20000),
("D","first bank",20000);

insert into manages values ("A","B"),
("C","D");

select * from works;

```

-- ans 1

```

select * from employee where
person_name in (SELECT person_name FROM works
where company_name = "first bank" && salary>10000);

```

-- ans2

```

select employee.person_name from employee,works ,company
where employee.person_name = works.person_name && works.company_name =
company.company_name &&
employee.city = company.city;

```

-- ans3

```

select p.person_name from employee p, employee r, manages m where p.person_name =
m.person_name
and m.manager_name =r.person_name

```

```
and p.street = r.street and p.city = r.city;
```

```
-- ans4
```

```
create table log_file(  
person_name varchar(255),  
old_company_name varchar(255),new_company_name varchar(255));
```

```
delimiter //
```

```
create trigger trig2
```

```
after update on works for each row
```

```
BEGIN
```

```
    Insert into log_file values(  
        OLD.person_name,OLD.company_name,NEW.company_name);
```

```
    END //
```

```
UPDATE works
```

```
set company_name = "NEW COMPANY11"
```

```
where person_name = "D";
```

```
select * from log_file;
```

14

```
create database q14;
```

```
use q14;
```

```
create table Supplier (sid int,sname varchar(255) );
```

```
create table Parts (pid int,pname varchar(255) ,color varchar(255) );
```

```
create table Catalog (sid int,pid int ,cost int );
```

```
Insert into Supplier values (101,'a'),(102,'b'),(103,'c');
```

```
Insert into Parts values (201,'ap','red'),(202,'bp','green'),(203,'cp','red');
```

```
Insert into Catalog values (101,201,50),(102,202,16),(103,203,50);
```

```
-- ans1
```

```
Select sname from Supplier where sid in (select sid from Catalog where pid in (select pid from  
parts where color = 'red'));
```

```
-- ans2
```

```
Select pname from Parts where pid in (select pid from Catalog where cost>25);
```

```
-- ans3
```

```
Select pname from Parts where color='green';
```

```
-- ans4
```

```
Select Supplier.sname,Parts.pname,Parts.color,Catalog.cost
from supplier,Parts,Catalog
where Supplier.sid = Catalog.sid && Catalog.pid = Parts.pid;
```

13

```
use q13;
```

```
Database changed
```

```
mysql> create table actors(aid int,name varchar(255));
```

```
mysql> create table movies(mid int,title varchar(255));
```

```
mysql> create table role(mid int,aid int ,rname varchar(255));
```

```
mysql> insert into actors values
```

```
    -> (101,'cc'),
```

```
    -> (102,'ak'),
```

```
    -> (103,'ab');
```

```
mysql> insert into movies values
```

```
    -> (203,'m3'),
```

```
    -> (202,'m2'),
```

```
    -> (201,'m1');
```

```
mysql> insert into role values
```

```
    -> (203,101,'r1'),
```

```
    -> (203,101,'r2'),
```

```
    -> (202,102,'role2');
```

```
-- ans2
```

```
create view actor_and_roles1 as
```

```
select mid,aid,count(*) as count from role group by aid ;
```

```
select * from actor_and_roles1;
```

```
select * from actor_and_roles1 where
```

```
mid = (select mid from movies where mid in (select mid from actor_and_roles1 where
aid=101));
```

```
-- ans3
```

```
select * from actors where aid not in (select aid from actor_and_roles1);
```

```
-- ans 4
```

```
SELECT name,title
```

```
FROM actors, role, movies
```

```
where actors.aid= role.aid and movies.mid = role.mid;
```

12

11

```
create trigger trig1 before update on parts for each row
begin
insert into logfile values(old.pno,curdate(),old.price,new.price);
end //
```

```
create procedure proc()
begin
update parts set price= case when qty>14 then price*0.8 else price*0.7 end ;
end //
```

10

```
create database q10;
use q10;
```

```
create table dept(
    dno int NOT NULL primary key,
    dname varchar(255),
    loc varchar(255)
);
create table Emp(
    eno int NOT NULL primary key,
    ename varchar(255),
    sal int,
    contact_no VARCHAR(255) ,
    Address varchar(255),
    dno int not null,
    foreign key (dno) references dept(dno));
```

```
create table project(
    pno int NOT NULL primary key,
    pname varchar(255)
);
```

```
create table assigned_to(
    eno int NOT NULL ,
    pno int NOT NULL
);
```

```
Insert into project
values
```

```
(353,'proj1'),  
(354,'proj2'),  
(355,'proj3');
```

```
Insert into assigned_to  
values  
(107,353),  
(108,353),  
(109,354),  
(107,355);
```

```
Insert into dept(dno,dname)  
values  
(101,'d1'),  
(102,'d2'),  
(103,'d3');
```

```
Insert into Emp(eno,ename,dno)  
values  
(107,'a',101),  
(108,'b',102),  
(109,'c',102);
```

```
-- ans1  
SELECT * FROM Emp where  
eno in (select eno from assigned_to where pno=353 OR pno=354);
```

```
-- ans2  
SELECT * FROM Emp where  
eno in (select eno from assigned_to where pno in (select pno from project where  
pname='proj1'));
```

```
-- ans3  
SELECT eno FROM Emp where  
eno in (select eno from assigned_to where pno in (select pno from assigned_to where  
eno=107));
```

```
-- ans 4  
select eno from assigned_to where pno in (select pno from assigned_to where eno=107);
```

```
-- ans 5  
create view new_view as  
SELECT pno, COUNT(*)  
FROM assigned_to
```



```
GROUP BY pno
ORDER BY COUNT(*)
limit 1;
```

```
select * from project where pno = (select pno from new_view);
```

-- ans 6

```
create view q6view5 as
select project.pno ,project.pname,count(*) as count from project
inner join assigned_to on assigned_to.pno = project.pno GROUP BY pno;
```

```
select * from q6view5;
```

-- ans 7

```
DELIMITER //
CREATE PROCEDURE p4(in pno_ip INT)
BEGIN
    DECLARE enum,esal,edno INT;
    DECLARE empname,econtact,eadd varchar(255);
    DECLARE c1 Cursor for SELECT * from Emp where eno in(select eno from assigned_to
where pno = pno_ip);
    open c1;
    get_info : loop fetch c1 into enum,empname,esal,econtact,eadd,edno;
        select enum,empname;
    end loop get_info;
END//
```

```
call p4(353);
```

-- ans 8

9

– ans1

```
SELECT * FROM emp
ORDER BY salary DESC
```

8

– ans1

```
Select * from emp where dept_no=30;
```

–ans2

```
Select emp_no, emp_name,dept from emp where designation = 'clerk'
```

–ans3

Select * from emp where comm>netsal

–ans4

Select * from emp where comm>0.6*netsal

–ans5

Select emp_name, designation, net_sal from emp where dept_no=20 && net_sal>2000;

–ans6

Select * from emp where dept_no=30 && net_sal>1500 && designation = 'clerk'

–ans7

Select * from emp where designation = 'manager' || designation = 'president'

–ans8

Select * from emp where designation = 'manager' && dept_no !=30;

–ans9

Select * from emp where dept_no=10 && (designation = 'manager' || designation = 'clerk')

–ans10

Select * from emp where (designation = 'manager' && dept_no =10) || (designation = 'clerk' && dept_no =20)

7

–ans1

```
SELECT pno, COUNT(*)  
FROM assigned_to  
GROUP BY pno
```

–ans2

```
SELECT * FROM Emp where  
eno in (select eno from assigned_to where pno in (select pno from project where  
pname='pr002'));
```

–ans3

Same as above

–ans4

DELIMITER //

Create trigger t1

after delete on emp

for each row

Begin

delete from assigned_to where eno = OLD.eno;

End;

delete from emp where eno = 109;

–ans5

Same as other triggers

6

5

```
create database q5;
use q5;
create table dept(Dept_No int primary key,D_Name varchar(255),Loc varchar(255));
create table project(Proj_No int primary key,Proj_Name varchar(255),status varchar(255));
create table emp(
Emp_No int primary key,
Designation varchar(255),
Sal int,
E_name varchar(255),
Dept_No int,
foreign key(Dept_No) references dept(Dept_No));
insert into dept values
(100,"Inventory","Pune"),
(101,"Marketing","Mumbai"),
(102,"Development","Pune");
insert into emp
values(201,"Clerk",20000,"SHYAM",100),(202,"Manager",50000,"Raj",101),(203,"Deveoper",40
000,"Raghu",102);
insert into project values(300,"BloodBank","Complete"),(301,"Adhaar","Ongoing");

-- ans1
select * from emp where dept_no in (select dept_no from dept where D_Name = 'INVENTORY'
&& Loc = 'Pune');

-- ans2
alter table emp add Proj_No int;
update emp set Proj_No=301 where Emp_No=203;
update emp set Proj_No=300 where Emp_No=201;
update emp set Proj_No=300 where Emp_No=202;
select * from emp where Proj_no in (select Proj_no from project where Proj_Name =
'BloodBank' );

-- ans3
select * from emp inner join dept on emp.Dept_No=dept.Dept_No where
Dept.D_Name="Marketing" and emp.Designation="Manager";
```

-- ans 4

```
select * from emp inner join project on emp.Proj_no=project.Proj_no where  
project.status="Ongoing" ;
```

-- ans 5

```
CREATE FUNCTION f3 (emp_no INT)  
RETURNS int  
DETERMINISTIC  
    RETURN (count(*)from);
```

```
SELECT f3(202);
```

-- ans6

delimiter //

```
create procedure p4(in desig varchar(255),in dno int)  
BEGIN
```

```
    case  
        when desig='Clerk' and dno=101 then Update emp set Sal = Sal*1.1 where Designation =  
desig;  
        when desig="Manager" and dno=102 then Update emp set Sal = Sal*1.05 where Designation  
= desig;  
        else Update emp set Sal = Sal*1.1 where Designation = desig;
```

```
    end case;  
end //
```

```
select * from emp;  
call p4('Clerk',100);  
select * from emp;
```

4

```
create database question_4;  
use question_4;  
create table emp  
( emp_id int,  
  emane varchar(255),  
  city varchar(255), state varchar(255), salary varchar(255),  
  age int,  
  hire_date date,  
  primary key (emp_id));  
insert into emp values (1,"Sanika","pune","Maharashtra",20001,25,"2008-12-1");  
insert into emp values (2,"Sarang","pune","Maharashtra",30001,45,"2008-12-1");  
insert into emp values (3,"Vaibhav","pune","Maharashtra",10001,19,"2008-12-1");
```

```
select * from emp;
```

```
-- ans 1
```

```
select emane from emp where emane like "Sa%";
```

```
-- ans2
```

```
select emane,salary,age from emp where age<40;
```

```
-- ans3
```

```
select emane,salary from emp where salary>20000 && salary<30000;
```

```
-- ans4
```

```
delimiter //
```

```
create procedure p1()
```

```
BEGIN
```

```
select * from emp order by salary desc limit 1;
```

```
END //
```

```
call p1();
```

3

2

1