

## DBMS LAB -7 SOLUTION

1.-----with function-----

```
delimiter //
create function dept_count ( faculty_name varchar(40))
returns integer
begin
declare d_count integer;
select count(*) into d_count
from class,enrolled,faculty,student
where class.name=enrolled.cname and enrolled.snum=student.snum and class.fid=faculty.fid and
faculty.fname=faculty_name;
return d_count;
end//
```

```
select dept_count();
```

1b.

```
select fname from faculty where dept_count(fname)>1;
```

2.-----with procedure-----

```
delimiter //
create procedure dept_count_student (in course_name varchar(30),
out d_count int(10))
begin
select count(*) into d_count
from enrolled
where enrolled.cname = course_name and enrolled.grade='F';
end; //
```

```
call dept_count_student('Operating System Design',@count);
select @count;
```

2.---with function----

```
delimiter //
create function stu_count ( course_name varchar(40))
returns integer
begin
declare d_count1 integer;
select count(*) into d_count1
from enrolled
where enrolled.cname=course_name and enrolled.grade='F';
return d_count1;
end//
```

```
select stu_count();
```

```
select distinct fname from faculty,class ,enrolled where faculty.fid=class.fid and  
class.name=enrolled.cname and stu_count(class.name)>1;
```

```
sol 3: -----trigger-----
```

```
delimiter //
```

```
create trigger tot_time after insert on works
```

```
for each row
```

```
begin
```

```
declare time integer;
```

```
select sum(pct_time) into time from works where works.eid=new.eid;
```

```
if time>100
```

```
then
```

```
SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'pct_time cannot be more than 100%';
```

```
end if;
```

```
end; //
```

```
delimiter;
```

```
delimiter //
```

```
create trigger tot_time1 after update on works
```

```
for each row
```

```
begin
```

```
declare time integer;
```

```
select sum(pct_time) into time from works where works.eid=new.eid;
```

```
if time>100
```

```
then
```

```
SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'pct_time cannot be more than 100%';
```

```
end if;
```

```
end; //
```

```
delimiter;
```