4) schema for collage DB

**Solutions :-**

drop table iamarks cascade constraints;

create table student

(usn varchar(10),

sname varchar(20),

address varchar(20),

phone number(10),

gender varchar(1),

primary key(usn));

desc student;

create table semsec

(ssid varchar(10),

sem number(1),

sec varchar(1),

primary key(ssid));

desc semsec;

create table class

(usn varchar(10),

ssid varchar(10),

primary key(usn,ssid),

foreign key(usn)references student(usn),

foreign key(ssid)references semsec(ssid));

desc class;

create table subject

(subcode varchar(10),

title varchar(20),

sem number(1),

credits number(2),

primary key(subcode));

desc subject;

create table iamarks

(usn varchar(10),

subcode varchar(10),

ssid varchar(10),

test1 number(3),

test2 number(3),

test3 number(3),

finalia number(3),

primary key(usn,subcode,ssid),

foreign key(usn)references student(usn),

foreign key(subcode)references subject(subcode),

foreign key(ssid)references semsec(ssid));

desc iamarks;

insert into student values('4DM16CS122','Vinayaka','Chikmanglur',8800880011,'M');

select \* from student;

insert into semsec values('CSE1A',1,'A');

insert into semsec values('CSE1B',1,'B');

insert into semsec values('CSE1C',1,'C');

select \* from semsec;

insert into class values('4DM16CS122','CSE3C');

delete from class where USN='4DM13CS062';

select \* from class;

insert into subject values('15CS36','DMS',3,3);

delete from subject where subcode='10CS83';

select \* from subject;

insert into iamarks (usn,subcode,ssid,test1,test2,test3) values ('4DM13CS066','10CS85','CSE8B',19,13,1);

select \* from iamarks;

select \* from student st

inner join class c on st.usn=c.usn

inner join semsec ss on c.ssid=ss.ssid

where ss.sem=4 and ss.sec='c';

select ss.sem,ss.sec,st.gender,count(st.gender) as count from student st

inner join class c on st.usn=c.usn

inner join semsec ss on c.ssid=ss.ssid

group by(ss.sem,ss.sec,st.gender) order by ss.sem;

create view test1 as

select im.\* from student st

inner join iamarks im on im.usn=st.usn

where st.usn='4DM13CS091';

create view highestvalue as

select usn,subcode,oldmark,row\_number() over(partition by subcode,usn.order by oldmark)

as dencevalue from

(select usn,subcode,test1 as

oldmark from iamarks

union all

select usn,subcode,test2 as oldmark from iamarks

union all

select usn,subcode,test3 as oldmark from iamarks);

update iamarks

set iamarks.finalia=(select sum(oldmarks)

count(oldmark) from highest value hv

where dencevalue !=1 and hv.subcode=iamarks.subcode and hv.usn=iamarks.usn

group by hv.subcode, hv.usn);

select

s.usn,sub.subcode,s.sname,s.address,s.phone,s.gender,

(case

when ia.finalia between 17 and 20 then 'OUTSTANDING'

when ia.finalia between 12 and 16 then 'AVERAGE'

else 'WEAK'

end) as cat

from student s

inner join iamarks ia on s.usn=ia.usn

inner join semsec ss on ss.ssid=ia.ssid

inner join subject sub on sub.subcode=ia.subcode

where sub.sem=8;