create table dept(

did number(5) constraint pk\_did primary key,

dname varchar2(50) constraint nn\_dname not null

);

create table student(

PRN number(10) constraint pk\_prn primary key,

sname varchar2(50) constraint nn\_sname not null,

mo number(10),

birthdate date,

did number(5) constraint fk\_did\_std references dept on delete cascade

);

create table subject(

subid number(5) constraint pk\_subid primary key,

subname varchar2(50) constraint nn\_subname not null,

did number(5) constraint fk\_did\_sub references dept on delete cascade

);

create table project(

pid number(5) constraint pk\_pid primary key,

pname varchar2(50) constraint nn\_pname not null,

mentor varchar2(50),

max\_marks number(3) constraint ck\_mm check(max\_marks > 0),

pass\_marks number(3) constraint ck\_pm check(pass\_marks > 0),

constraint ck\_mm\_pm check(pass\_marks < max\_marks),

constraint uk\_pname unique(pname),

sub\_date date,

subid number(5) constraint fk\_subid\_project references subject on delete cascade

);

create table project\_info(

PRN number(10) constraint fk\_prn references student on delete cascade,

subid number(5) constraint fk\_subid\_project\_info references subject on delete cascade,

pid number(5) constraint fk\_pid references project on delete cascade,

marks\_obtained number(3),

constraint pk\_prn\_subid primary key (PRN , subid)

);

create or replace procedure Add\_data(

prn IN student.prn%type, pid IN project.pid%type, subid IN subject.subid%type, mark IN project\_info.marks\_obtained%type)

AS

begin

INSERT INTO PROJECT\_INFO VALUES (prn, subid, pid, mark);

commit;

end;

create or replace trigger check1

before insert on project\_info

for each row

declare

m project\_info.marks\_obtained%type;

t number(1);

begin

select max\_marks into m from project where pid = :new.pid;

select count(\*) into t from project\_info where pid = :new.pid;

if t >= 5 then

raise\_application\_error(-20000,'More then 5 student are not allowed in one project');

end if;

if :new.marks\_obtained not between 0 and m then

raise\_application\_error(-20001,'marks must lies between 0 and ' || m );

end if;

end check1;

create or replace procedure Add\_data(

prn IN student.prn%type, pid IN project.pid%type, subid IN subject.subid%type, mark IN project\_info.marks\_obtained%type)

AS

begin

INSERT INTO PROJECT\_INFO VALUES (prn, subid, pid, mark);

commit;

end;

create or replace trigger check2

before update on project\_info

for each row

declare

m project\_info.marks\_obtained%type;

t number(1);

begin

select max\_marks into m from project where pid = :new.pid;

if :new.pid != :old.pid then

select count(\*) into t from project\_info where pid = :new.pid;

if t >= 5 then

raise\_application\_error(-20000,'More then 5 student are not allowed in one project');

end if;

end if;

if :new.marks\_obtained not between 0 and m then

raise\_application\_error(-20001,'marks must lies between 0 and ' || m );

end if;

end check2;

create or replace function create\_result

(prn1 student.prn%type)

return boolean

as

proname project.pname%type;

tutor project.mentor%type;

maxmarks project.max\_marks%type;

passmarks project.pass\_marks%type;

subdate project.sub\_date%type;

sub\_id project.subid%type;

subjectname subject.subname%type;

m project\_info.marks\_obtained%type;

name student.sname%type;

mobile student.mo%type;

dob student.birthdate%type;

deptid student.did%type;

deptname dept.dname%type;

cursor c1 is select \* from project\_info where prn = prn1;

row1 project\_info%rowtype;

space1 varchar2(10) := ' ';

space2 varchar2(100) := '----------------------------------------------------------------------------------------';

begin

select sname,mo,birthdate,student.did into name,mobile,dob,deptid from student where student.prn = prn1;

select dname into deptname from dept where did = deptid;

dbms\_output.put\_line(space1);

dbms\_output.put\_line(space2);

dbms\_output.put\_line(space1);

dbms\_output.put\_line('Student Details:');

dbms\_output.put\_line(space1);

dbms\_output.put\_line('Name : ' || name);

dbms\_output.put\_line('PRN : ' || prn1);

dbms\_output.put\_line('Department : ' || deptname);

dbms\_output.put\_line('DOB : ' || dob);

dbms\_output.put\_line('MO : ' || mobile);

dbms\_output.put\_line(space1);

dbms\_output.put\_line(space2);

dbms\_output.put\_line(space1);

dbms\_output.put\_line('Project Details :');

open c1;

loop

fetch c1 into row1 ;

if c1%notfound then exit; end if;

select pname,mentor,max\_marks,pass\_marks,sub\_date,subid into proname,tutor,maxmarks,passmarks,subdate,sub\_id from project where pid = row1.pid;

select subname into subjectname from subject where subid = sub\_id;

-- select marks\_obtained into m from project\_info where prn = row1.prn;

dbms\_output.put\_line(space1);

dbms\_output.put\_line('Project Name : ' || proname);

dbms\_output.put\_line('Subject : ' || subjectname);

dbms\_output.put\_line('Mentor : ' || tutor);

dbms\_output.put\_line('Max Marks : ' || maxmarks);

dbms\_output.put\_line('Passing Marks : ' || passmarks);

dbms\_output.put\_line('Marks Obtain : ' || row1.marks\_obtained );

dbms\_output.put\_line('Sub\_date : ' || subdate);

end loop;

return true;

end;

declare

result1 boolean;

begin

result1 := create\_result(8021070001);

end;

create or replace procedure subject\_details

(subjectid subject.subid%type)

as

proname project.pname%type;

tutor project.mentor%type;

maxmarks project.max\_marks%type;

passmarks project.pass\_marks%type;

subdate project.sub\_date%type;

subjectname subject.subname%type;

deptname dept.dname%type;

cursor c1 is select \* from project where subid = subjectid;

row1 project%rowtype;

space1 varchar2(10) := ' ';

space2 varchar2(100) := '----------------------------------------------------------------------------------------';

begin

select subname into subjectname from subject where subid = subjectid;

select dname into deptname from dept where did in(select did from subject where subid = subjectid);

dbms\_output.put\_line(space1);

dbms\_output.put\_line(space2);

dbms\_output.put\_line(space1);

dbms\_output.put\_line('Subject Details : ');

dbms\_output.put\_line(space1);

dbms\_output.put\_line('Subject Name : ' || subjectname);

dbms\_output.put\_line('Subject ID : ' || subjectid);

dbms\_output.put\_line('Dept Name : ' || deptname);

dbms\_output.put\_line(space1);

dbms\_output.put\_line(space2);

dbms\_output.put\_line(space1);

dbms\_output.put\_line('Project Details :');

open c1;

loop

fetch c1 into row1;

exit when c1%notfound;

select pname,mentor,max\_marks,pass\_marks,sub\_date into proname,tutor,maxmarks,passmarks,subdate from project where pid = row1.pid;

dbms\_output.put\_line(space1);

dbms\_output.put\_line('Project Name : ' || proname);

dbms\_output.put\_line('Project ID : ' || row1.pid);

dbms\_output.put\_line('Mentor : ' || tutor);

dbms\_output.put\_line('Max Marks : ' || maxmarks);

dbms\_output.put\_line('Passing Marks : ' || passmarks);

dbms\_output.put\_line('Sub\_date : ' || subdate);

end loop;

end;

begin

subject\_details(20001);

end;

create or replace procedure student\_status

(prn1 in student.prn%type, pid1 in project.pid%type, subid1 in subject.subid%type, P\_F\_status out varchar)

as

m project\_info.marks\_obtained%type;

pm project.pass\_marks %type;

begin

select marks\_obtained into m from project\_info where prn = prn1 and pid = pid1 and subid = subid1;

select pass\_marks into pm from project where pid = pid1;

if m < pm then P\_F\_status := 'F';

else P\_F\_status := 'F';

end if;

end;