**Student Information System**

SQL> create table student(sno number(10),sname varchar(15),saddr varchar(15),primary key(sno));

SQL> create table room(rno varchar(10),primary key(rno));

SQL> create table teacher(cname varchar(15),tname varchar(15),primary key(tname));

SQL> create table studroom(sno number(10),rno varchar(10),primary key(sno),

foreign key(sno) references student(sno),foreign key(rno) references room(rno));

SQL> create table teachroom(rno varchar(10),tname varchar(15),foreign key(rno)

references room(rno),foreign key(tname) references teacher(tname),primary key(rno,tname));

SQL> insert into student values(&sno,'&sname','&saddr');

Enter value for sno: 101

Enter value for sname: Rama

Enter value for saddr: Tirupati

old 1: insert into student values(&sno,'&sname','&saddr')

new 1: insert into student values(101,'Rama','Tirupati')

1 row created.

SQL> /

Enter value for sno: 102

Enter value for sname: Lakshman

Enter value for saddr: Chittoor

old 1: insert into student values(&sno,'&sname','&saddr')

new 1: insert into student values(102,'Lakshman','Chittoor')

1 row created.

SQL> /

Enter value for sno: 103

Enter value for sname: Sita

Enter value for saddr: Tirupati

old 1: insert into student values(&sno,'&sname','&saddr')

new 1: insert into student values(103,'Sita','Tirupati')

1 row created.

SQL> select \* from student;

SNO SNAME SADDR

---------- --------------- ---------------

101 Rama Tirupati

102 Lakshman Chittoor

103 Sita Tirupati

104 Arjun Nellore

105 Bharath Kadapa

SQL> insert into room values('&rno');

Enter value for rno: CS101

old 1: insert into room values('&rno')

new 1: insert into room values('CS101')

1 row created.

SQL> /

Enter value for rno: CS201

old 1: insert into room values('&rno')

new 1: insert into room values('CS102')

1 row created.

SQL> select \* from room;

RNO

----------

CS101

CS102

EC101

ME101

ME102

SQL> select \* from teacher;

CNAME TNAME

--------------- ---------------

DBMS William

CAD John

Python Smith

Smart Sensors Mark

SQL> insert into studroom values(&sno,'&rno');

Enter value for sno: 101

Enter value for rno: CS102

old 1: insert into studroom values(&sno,'&rno')

new 1: insert into studroom values(101,'CS102')

1 row created.

SQL> /

Enter value for sno: 102

Enter value for rno: CS102

old 1: insert into studroom values(&sno,'&rno')

new 1: insert into studroom values(102,'CS102')

1 row created.

SQL> select \* from studroom;

SNO RNO

---------- ----------

101 CS102

102 CS102

103 EC101

104 CS101

105 ME102

SQL> insert into teachroom values('&rno','&tname');

Enter value for rno: CS101

Enter value for tname: Smith

old 1: insert into teachroom values('&rno','&tname')

new 1: insert into teachroom values('CS101','Smith')

1 row created.

SQL> /

Enter value for rno: EC101

Enter value for tname: Mark

old 1: insert into teachroom values('&rno','&tname')

new 1: insert into teachroom values('EC101','Mark')

1 row created.

SQL> select \* from teachroom;

RNO TNAME

---------- ---------------

CS101 Smith

EC101 Mark

ME102 John

CS102 William

**Write a query to find the names of all the students in each class room**

SQL Query:

SQL> select s.sname as Name,sr.rno as Class from student s inner join studroom sr

on s.sno=sr.sno;

NAME CLASS

--------------- ----------

Rama CS102

Lakshman CS102

Sita EC101

Arjun CS101

Bharath ME102

PL/SQL Query:

SQL> set serveroutput on;

SQL> declare

2 cursor cr\_nm is select s.sname as name,sr.rno as class from student s inner join studroom sr

on s.sno=sr.sno;

3 v\_nm cr\_nm%rowtype;

4 begin

5 dbms\_output.put\_line('Name Class');

6 open cr\_nm;

7 loop

8 fetch cr\_nm into v\_nm;

9 exit when cr\_nm%notfound;

10 dbms\_output.put\_line(v\_nm.name||' '||v\_nm.class);

11 end loop;

12 end;

13 /

Name Class

Rama CS102

Lakshman CS102

Sita EC101

Arjun CS101

Bharath ME102

PL/SQL procedure successfully completed.