```sql
create table dept(
        deptid number(4) constraint pkDept primary key,
        deptname varchar2(20)
);
create table Employee(
        EmpId number(4) constraint pkEmp primary key,
        FirstName varchar2(20),
        LastName varchar2(20),
        EmailId varchar2(20),
        MobileNo char(10),
        DateOfJoining date default sysdate,
        DeptId int
);
alter table employee add gender char(1);
alter table employee add constraint employee_gender_chk check(gender
in ('M', 'F'));
alter table employee add constraint employee_dept_ref foreign key(deptid) references
dept(deptid) on delete set null;


create table Loc(
        locid number(4) constraint pkloc primary key,
        city varchar2(100)
);
alter table dept add ( locid number(4) constraint fkloc references Loc(locid));


create sequence seqLoc
increment by 1
start with 800
nocycle
cache 5;
insert into loc values(seqLoc.nextval , 'Kolkata');
```

insert into loc values (seqLoc.nextval , 'Ahmedabad');

insert into loc values (seqLoc.nextval , 'Mumbai');

insert into loc values (seqLoc.nextval , 'Bangalore');

insert into loc values (seqLoc.nextval , 'Hyderabad');

update department set locid = 800 where deptid = 111;

update department set locid = 803 where deptid = 201;

update department set locid = 801 where deptid = 301;

alter session set "_ORACLE_SCRIPT"=TRUE;

create user tempUser1 identified by password;

grant all privileges to tempUser1;

conn tempUser1

Enter password: (Here password is entered)

select e.firstname, d.deptname, l.city from SYSTEM.employee e natural join SYSTEM.department d natural join SYSTEM.loc l;

The commands and their ouput in SQL Plus are attached below:

```
SQL> create table dept(
  2  deptId number(4) constraint pkDept primary key,
  3  deptName varchar2(20));

Table created.

SQL> insert into dept values(111,'Analyst');

1 row created.

Commit complete.
SQL> insert into dept values(201,'Research');

1 row created.

Commit complete.
SQL> insert into dept values(301,'Finance');

1 row created.

Commit complete.
SQL> create table Employee(
  2  empid number(4) constraint pkEmp primary key,
  3  firstname varchar2(20),
  4  lastname varchar2(20),
  5  emailId varchar2(20),
  6  mobileNo char(10),
  7  DateOfJoining date default sysdate,
  8  DeptId int);

Table created.

SQL> alter table employee add constraint employee_gender_chk check(gender
  2  ;

*
ERROR at line 2:
ORA-00920: invalid relational operator


SQL> alter table employee add gender char(1);

Table altered.

SQL> desc employee;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 EMPID                                     NOT NULL NUMBER(4)
 FIRSTNAME                                          VARCHAR2(20)
 LASTNAME                                           VARCHAR2(20)
 EMAILID                                            VARCHAR2(20)
 MOBILENO                                           CHAR(10)
 DATEOFJOINING                                      DATE
 DEPTID                                             NUMBER(38)
 GENDER                                             CHAR(1)

SQL> alter table employee add constraint employee_gender_chk check(gender in ('M','F'));

Table altered.
```

SQL Plus

```
SQL> alter table employee add constraint employee_dept_ref foreign
  2  key(deptid) references dept(deptid) on delete set null;

Table altered.

SQL> create table Loc(
  2  locid number(4) constraint pkloc primary key,
  3  city varchar2(100)
  4  );

Table created.

SQL> alter table department
  2  add ( locid number(4) constraint fkloc references Loc(locid));
alter table department
*
ERROR at line 1:
ORA-00942: table or view does not exist


SQL> alter table dept
  2  add ( locid number(4) constraint fkloc references Loc(locid));

Table altered.
```

```
SQL Plus

SQL> create sequence seqLoc
  2  increment by 1
  3  start with 800
  4  nocycle
  5  cache 5;

Sequence created.

SQL> insert into loc values(seqLoc.nextval,'Kolkata');

1 row created.

Commit complete.
SQL> insert into loc values(seqLoc.nextval,'Ahmedabad');

1 row created.

Commit complete.
SQL> insert into loc values(seqLoc.nextval,'Mumbai');

1 row created.

Commit complete.
SQL> insert into loc values(seqLoc.nextval,'Bangalore');

1 row created.

Commit complete.
SQL> insert into loc values(seqLoc.nextval,'Hyderabad');

1 row created.

Commit complete.
SQL> update dept set locid = 800 where deptid=111;

1 row updated.

Commit complete.
SQL> update dept set locid = 803 where deptid=201;

1 row updated.

Commit complete.
SQL> update dept set locid = 801 where deptid=301;

1 row updated.

Commit complete.
SQL> insert into employee values(101, 'abc', 'def', 'abc@gmail.com', 'M', '987654321', sysdate, 111,45000);
insert into employee values(101, 'abc', 'def', 'abc@gmail.com', 'M', '987654321', sysdate, 111,45000)
            *
ERROR at line 1:
ORA-00913: too many values


SQL> alter table employee add salary number(7);

Table altered.

SQL> insert into employee values(101, 'abc', 'def', 'abc@gmail.com', '987654321', sysdate, 111,'M',45000);

1 row created.
```

```
Commit complete.
SQL> insert into employee values(102, 'ghi', 'jkl', 'ghi@gmail.com', '9873374321', sysdate, 111,'M',35000);

1 row created.

Commit complete.
SQL> insert into employee values(103,'mno','pqr','mno@gmail.com','7894561238',sysdate,301,'F',55000);

1 row created.

Commit complete.
SQL> insert into employee values(104,'stu','vwx','stu@gmail.com','7894441238',sysdate,201,'F',25000);

1 row created.

Commit complete.
SQL> select * from dept;

    DEPTID DEPTNAME                LOCID
---------- ------------------- ----------
       111 Analyst                    800
       201 Research                   803
       301 Finance                    801

SQL> select * from employee;

     EMPID FIRSTNAME           LASTNAME             EMAILID
---------- ------------------- -------------------- --------------------
MOBILENO   DATEOFJOI  DEPTID G     SALARY
---------- --------- ---------- - ----------
       101 abc                 def                  abc@gmail.com
987654321  03-FEB-23     111 M      45000

       102 ghi                 jkl                  ghi@gmail.com
9873374321 03-FEB-23     111 M      35000

       103 mno                 pqr                  mno@gmail.com
7894561238 03-FEB-23     301 F      55000


     EMPID FIRSTNAME           LASTNAME             EMAILID
---------- ------------------- -------------------- --------------------
MOBILENO   DATEOFJOI  DEPTID G     SALARY
---------- --------- ---------- - ----------
       104 stu                 vwx                  stu@gmail.com
7894441238 03-FEB-23     201 F      25000


SQL> select * from loc;

     LOCID
----------
CITY
--------------------------------------------------------------------------------
       800
Kolkata

       801
Ahmedabad

       802
Mumbai
```

```
      LOCID
----------
CITY
--------------------------------------------------------------------------------
       803
Bangalore

       804
Hyderabad


SQL> create user tempUser identified by password;
create user tempUser identified by password
                *
ERROR at line 1:
ORA-65096: invalid common user or role name


SQL> alter session set "_ORACLE_SCRIPT"=TRUE;

Session altered.

SQL> create user tempUser1 identified by password;

User created.

SQL> grant all privileges to tempUser1;

Grant succeeded.

SQL> conn tempUser1;
Enter password:
Connected.
SQL> select e.firstname,d.deptname,l.city from SYSTEM.employee e natural join SYSTEM.dept d natural join SYSTEM.loc l;

FIRSTNAME            DEPTNAME
-------------------- --------------------
CITY
--------------------------------------------------------------------------------
abc                  Analyst
Kolkata

ghi                  Analyst
Kolkata

mno                  Finance
Ahmedabad


FIRSTNAME            DEPTNAME
-------------------- --------------------
CITY
--------------------------------------------------------------------------------
stu                  Research
Bangalore


SQL>
```