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**EXPERIMENT NO. 00**

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**AIM\_:** To create a two-relation database and execute queries against it.

**PROBLEM STATEMENT:**

*Consider the conceptual and the logical schemata for the **Citizen Database**.*

PERSON(AadharNo, FName, LName, Gender, BirthDate, PinCode, Email)

CONTACT(AadharNo, Phone)

“Phone” indicates the contact number as mobile number(s) and / or landline numbers. For Landline numbers the initial ‘0’ in STD Code is omitted in data entry.

PERSON			
Attribute	Domain Spec	Constraints	Null
AadharNo	Numeric, 12 digits	EI-Column [PK]	No
FName	Alphabetic, 15 char		No
LName	Alphabetic, 15 char		No
Gender	Alphabetic, 1 char	Possible Values (M,F,m,f)	No
BirthDate	Date [dd-mon-yyyy]	SYSDATE - (365 * 18)	No
PinCode	Numeric, 6 digits		Yes
Email	Alphanumeric, 35 char		Yes

CONTACT			
Attribute	Domain Spec	Constraints	Null
AadharNo	Numeric, 12 digits	EI-Column [PK] RI- Column [FK] references PERSON EI-Column [PK]	No
Phone	Numeric, 10 digits		No

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**QUERY-01:** Create the relations PERSON and CONTACT with specified constraints.

\*\*\*\*\*

```
CREATE TABLE PERSON (  
  3     AadharNo number(12) NOT NULL,  
  4     FName char(15) NOT NULL ,  
  5     LName char(15) NOT NULL ,  
  6     Gender char(1)  NOT NULL,  
  7     BirthDate  DATE DEFAULT (SYSDATE-365*12) NOT NULL,  
  8     PinCode number(6) NULL,  
  9     Email varchar2(35) NULL,  
 10     constraint person_pk_AadharNo primary key(AadharNo),  
 11     constraint person_ck_Gender check(Gender in('M','F','m','f'))  
 12 );
```

Table created.

**SQL> DESC PERSON;**

Name	Null?	Type
AADHARNO	NOT NULL	NUMBER(12)
FNAME	NOT NULL	CHAR(15)
LNAME	NOT NULL	CHAR(15)
GENDER	NOT NULL	CHAR(1)
BIRTHDATE	NOT NULL	DATE
PINCODE		NUMBER(6)
EMAIL		VARCHAR2(35)

**CREATE TABLE CONTACT**

```
  2  (  
  3     AadharNo number(12) NOT NULL,  
  4     PhoneNo number(10) NOT NULL,  
  5     constraint contact_fk_AadharNo foreign key(AadharNo) references  
person(AadharNo)  
  6  );
```

Table created.

**SQL> DESC CONTACT;**

Name	Null?	Type
AADHARNO	NOT NULL	NUMBER(12)
PHONENO	NOT NULL	NUMBER(10)

```
*****
QUERY-02: List the primary key constraints for the Citizen Database. Your output
must include table name, constraint name, constraint type and table
owner.
*****
```

```
SELECT TABLE_NAME,CONSTRAINT_NAME,CONSTRAINT_TYPE,OWNER FROM
USER_CONSTRAINTS WHERE UPPER(TABLE_NAME)='PERSON' and CONSTRAINT_TYPE='P';
```

TABLE_NAME	CONSTRAINT_NAME	C	OWNER
PERSON	PERSON_PK_AADHARNO	P	CS5A27

```
SELECT TABLE_NAME,CONSTRAINT_NAME,CONSTRAINT_TYPE,OWNER FROM
USER_CONSTRAINTS WHERE UPPER(TABLE_NAME)='PERSON';
```

TABLE_NAME	CONSTRAINT_NAME	C	OWNER
PERSON	SYS_C008331	C	CS5A27
PERSON	SYS_C008332	C	CS5A27
PERSON	SYS_C008333	C	CS5A27
PERSON	SYS_C008334	C	CS5A27
PERSON	PERSON_CK_GENDER	C	CS5A27
PERSON	SYS_C008330	C	CS5A27
PERSON	PERSON_PK_AADHARNO	P	CS5A27

7 rows selected.

```
SELECT TABLE_NAME,CONSTRAINT_NAME,CONSTRAINT_TYPE,OWNER FROM
USER_CONSTRAINTS WHERE UPPER(TABLE_NAME)='CONTACT';
```

TABLE_NAME	CONSTRAINT_NAME	C	OWNER
CONTACT	CONTACT_FK_AADHARNO	R	CS5A27
CONTACT	SYS_C008337	C	CS5A27
CONTACT	SYS_C008338	C	CS5A27

\*\*\*\*\*

**QUERY-03: Insert 5-7 tuples into PERSON table.**

\*\*\*\*\*

```
INSERT INTO PERSON VALUES (936102676304,'Diksha','Gupta','F','10-Mar-2002',440034,'diksharg2002@gmail.com');
```

1 row created.

```
INSERT INTO PERSON VALUES (296807981959,'Rita','Gupta','F','01-Jan-1977',440034,'rita_rg1977@gmail.com');
```

1 row created.

```
INSERT INTO PERSON VALUES (666376614287,'Deepika','Gupta','F','09-Aug-1999',440034,'dipikarg_1999@gmail.com');
```

1 row created.

```
INSERT INTO PERSON VALUES (324317985816,'Ram','Sharma','m','25-Jun-1972',440032,'rbsharma_1972@gmail.com');
```

1 row created.

```
INSERT INTO PERSON VALUES (936317988190,'Nikhil','shah','M','10-May-2001',440032,'Nikhils_2001@gmail.com');
```

1 row created.

```
INSERT INTO PERSON VALUES (936317179856,'Nidhi','Joshi','f','21-Apr-1994',440032,'NidhiJoshi_94@gmail.com');
```

1 row created.

```
INSERT INTO PERSON VALUES (179858166754,'Niraj','Sharma','M','25-Dec-1992',440072,'Niraj_sharma_92@gmail.com');
```

1 row created.

\*\*\*\*\*

**QUERY-04:** Insert 8-12 tuples in CONTACT table.

\*\*\*\*\*

**INSERT INTO CONTACT VALUES (936102676304,9890176792);**

1 row created.

**INSERT INTO CONTACT VALUES (936102676304,7888226967);**

1 row created.

**INSERT INTO CONTACT VALUES (936102676304,0712794523);**

1 row created.

**INSERT INTO CONTACT VALUES (324317985816,9890456789);**

1 row created.

**INSERT INTO CONTACT VALUES (324317985816,8956478904);**

1 row created.

**INSERT INTO CONTACT VALUES (296807981959,9856326789);**

1 row created.

**INSERT INTO CONTACT VALUES (296807981959,8926789059);**

1 row created.

**INSERT INTO CONTACT VALUES (179858166754,8904453623);**

1 row created.

**INSERT INTO CONTACT VALUES (666376614287,7888226967);**

1 row created.

**INSERT INTO CONTACT VALUES (324317985816,8956478904);**

1 row created.

\*\*\*\*\*

**QUERY-05** Save the database state [COMMIT) and List the contents of the Citizen Database.

\*\*\*\*\*

**COMMIT;**

**Commit complete.**

**SET LINESIZE 100 PAGESIZE 15**

**SELECT \* FROM PERSON;**

AADHARNO	FNAME	LNAME	GENDER	BIRTHDATE	PINCODE	EMAIL
936102676304	Diksha	Gupta	F	10-MAR-02	440034	diksharg2002@gmail.com
296807981959	Rita	Gupta	F	01-JAN-77	440034	rita_rg1977@gmail.com
666376614287	Deepika	Gupta	F	09-AUG-99	440034	dipikarg_1999@gmail.com
324317985816	Ram	Sharma	m	25-JUN-72	440032	rbsharma_1972@gmail.com
936317988190	Nikhil	shah	M	10-MAY-01	440032	NikhilS_2001@gmail.com
936317179856	Nidhi	Joshi	f	21-APR-94	440032	NidhiJoshi_94@gmail.com
179858166754	Niraj	Sharma	M	25-DEC-92	440072	Nirajharma_92@gmail.com

7 rows selected.

**SELECT \* FROM CONTACT;**

AADHARNO	PHONENO
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936102676304	9890176792
936102676304	7888226967
936102676304	712794523
324317985816	9890456789
324317985816	8956478904
296807981959	9856326789
296807981959	8926789059
179858166754	8904453623
666376614287	7888226967
324317985816	8956478904

10 rows selected.

\*\*\*\*\*

**QUERY-06** List the first name, last name, gender, pin code and email for all persons

\*\*\*\*\*

```
SELECT FNAME, LNAME, GENDER, PINCODE, EMAIL FROM PERSON;
```

FNAME	LNAME	G	PINCODE	EMAIL
Diksha	Gupta	F	440034	diksharg2002@gmail.com
Rita	Gupta	F	440034	rita_rg1977@gmail.com
Deepika	Gupta	F	440034	dipikarg_1999@gmail.com
Ram	Sharma	m	440032	rbsharma_1972@gmail.com
Nikhil	shah	M	440032	NikhilS_2001@gmail.com
Nidhi	Joshi	f	440032	NidhiJoshi_94@gmail.com
Niraj	Sharma	M	440072	Niraj_sharma_92@gmail.com

7 rows selected.

\*\*\*\*\*

**QUERY-07** List the person name and phone numbers for the person with name as that of yours.

\*\*\*\*\*

```
SELECT PERSON.FName, PERSON.LName, CONTACT.PhoneNo FROM PERSON, CONTACT
WHERE PERSON.FName='Diksha' and PERSON.AadharNo=CONTACT.AadharNo;
```

FNAME	LNAME	PHONENO
Diksha	Gupta	9890176792
Diksha	Gupta	7888226967
Diksha	Gupta	712794523

\*\*\*\*\*

**QUERY-08** List the contact numbers for your family.

\*\*\*\*\*

```
SELECT PERSON.FName, PERSON.LName, CONTACT.PhoneNo FROM PERSON, CONTACT
WHERE PERSON.LName='Gupta' and PERSON.AadharNo=CONTACT.AadharNo;
```

FNAME	LNAME	PHONENO
Diksha	Gupta	9890176792
Diksha	Gupta	7888226967
Diksha	Gupta	712794523
Rita	Gupta	9856326789
Rita	Gupta	8926789059
Deepika	Gupta	7888226967

\*\*\*\*\*

**QUERY-09** List the persons (i.e., last name, first name) whose contact is the mentioned phone number.

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```
SELECT PERSON.FName, PERSON.LName FROM PERSON, CONTACT WHERE
CONTACT.PhoneNo=7888226967 and PERSON.AadharNo=CONTACT.AadharNo;
```

FNAME	LNAME
Diksha	Gupta
Deepika	Gupta

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#### INFERENCES OF THE EXPERIMENT

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Hence , we have successfully create a two-relation database and execute queries against it