

REVIEW-1

INTRODUCTION:

Our project is based on orphan house database management system. The database contains all the information about the kids present in this orphanage, staff and ngo's which are connected to them. It also contains details about various facilities like education and health provided to them. Information about the families which are interested in adoption, and the various events organized to raise awareness and funds, all this information can be found in this database.

DATA REQUIREMENTS:

ENTITIES:

1. **KIDS:** An entity type which has many attributes like Name (composite attribute) which is divided into first, middle and last name. Every child has been given a **K-ID** which is unique for every child. Other attributes like religion and gender, D.O.B and D.O.J are also present.
2. **HEALTH REPORT(KIDS):** An entity type which has attributes like food allergies, an **ID** which is different for every child, height, weight and blood group.

3. **ADOPTIVE FAMILIES:** An entity type which has many attributes like Name of the parents, Address, Salary earned by parents, Blood Group, Religion. Every family has a **F-ID** which is uniquely identified. Other attributes like health problems and contact details are multi valued types. Apart from these attributes D.O.B and D.O.A are also present. There is one more attribute called Age which is a derived attribute (parent attribute- D.O.B).
4. **STAFF:** An entity type which has attributes like Name, Post , Address. Every staff member has a distinct **S-ID** . There are other attributes called Salary, Phone number and D.O.B.
5. **NGO'S :** An entity type which has attributes like Name and address. Every Ngo which has an association with the orphanage has an unique ID called **N-ID**. There are two multi valued attributes. First is contact details The other is cause the NGO supports.
6. **TUTORS:** An entity type which has attributes like name, degree and contact details of the teacher. **T-ID** is another attribute assigned to every tutor which teaches the kids. There is another attribute called subject which is a multi valued attribute
7. **DOCTORS:** An entity type which has attributes like name, degree, contact details and speciality. **D-ID** is another attribute which is assigned to every doctor which works with the NGO for the orphanage.
8. **EVENTS:** This is a weak entity type. It has attributes like Name, budget and Date of event. There is a multi-valued attribute called cause for the event.

RELATIONSHIPS:

1. Kids are adopted by adopted families (M-1)

One child can be adopted by only one family but a family can adopt more than one child. Children have partial participation while family has total participation.

2. Kids are taken care by staff (M-N)

A staff member can take care of more than one child and a child can be taken care of by more than one staff member. Both have total participation.

3. Kids are taught by tutors (M-N)

One tutor can teach more than one child. Similarly a child can be taught by multiple tutors. Both have total participation.

4. Doctor makes the health report (1-M)

A doctor can make more than one health report but a child can have only one health report. Both have total participation.

5. NGO'S hosts events (M-N)

A NGO can organize multiple events and one event can be organized by more than one NGO. Events has total participation while NGO has partial participation as it is not necessary for the NGO to organize all the events, but it is necessary for all the events to be organized by the NGO.

6. Kids participate in events (M-N)

Children can participate in multiple events and one event can have multiple participants. Both have total participation.

7. Doctors have tie up with NGO's (M-N)

A NGO can have tie up with more than one doctor. Similarly a doctor can have tie up with more than one NGO. Both have total participation.

8. Tutors have tie up with NGO's (M-N)

A NGO can have tie up with more than one tutor. Similarly a teacher can have tie up with more than one NGO. Both have total participation.

Functional Requirements:

USER (staff of orphanage)

The System must allow users to login if they enter the correct login id and password according to the post they hold in the orphanage. The user must be able to access the following:

- Details of the kids in the orphanage
- Details of the families who adopt the kids and also the families who are interested in adopting children.
- The health report for each kid should also be visible accordingly.
- Detail of each staff member.
- Details of the NGO'S
- Details of the events organised/sponsored by them. Also event participation details.
- Details of the doctors, tutors provided by different NGO's.

Basic Analogy

- 1) View the website
- 2) Login in the website
- 3) Select the menu of which details you want to see
- 4) View the kids details
- 5) View respective adoptive family detail
- 6) View the health report of each kid
- 7) View the NGO's who sponsor
- 8) View the details of Events taking place
- 9) View details of the Tutors and Doctors
- 10) View the Staff details

Example- View all staff details

- 1)The name
- 2)The address
- 3)The contact no.
- 4)The salary
- 5)The post
- 6)The staff ID

ADMINISTRATOR

Administrator of this orphanage based database system is in charge of creating the website for the orphanage which is used to access the database. Administrator has all the privileges of the user but has the authority to add, update and remove data from the database which the user cannot do.

The administrator is responsible for:

- Creating login ids and passwords for different users accounts.
- They have the authority to update the information in the database as well.
- They can add new NGO'S that have tied up with the orphanage
- Modify the contact no. of an adoptive family if needed.
- Modify the health report from time to time basis.
- If a staff member resigns then the administrator can remove the details of the respective staff member from the database as well.

Basic analogy

- 1) Create website
- 2) Generate logins
- 3) Display menus to choose from (eg- kid, staff e.t.c.)
- 4) Add , update or remove the data according to the requirements

○ different scenarios of removal of old data

- ◆ If any staff member resigns or is removed, then their data needs to be removed from the database.
- ◆ If a NGO withdraws their sponsorship from the orphanage, their data needs to be removed.
- ◆ If a doctor or a tutor resigns or is removed, then their data needs to be removed from the database
- ◆ If an event that was supposed to be conducted gets cancelled due unforeseen reasons, its details need to be removed

○ different scenarios for modification of existing data

- 1 After the regular checkups the kids health report data (eg. height, weight) needs to be modified if any changes occur.
- 2 If a staff member gets a promotion their post and salary should be modified accordingly.

- 3 If an adoptive family is relocating to a new address or they change their contact details then the following details needs to be modified.
- 4 If the event budget is changed due to any unforeseen reason, the budget needs to be modified.

- **eight different scenarios of data retrieval.**

- **View all the information of the kid**

Retrieved data:

- a) Name
- b) Gender
- c) Religion
- d) K-ID
- e) D.o.b
- f) D.o.j

- **View the health problems and id-proofs of all the adoptive families**

We are retrieving the health problems with the id-proof

- a) F-ID
- b) Health problems

- View the name and contact details of all the staff members.

The Retrieved data:

- a) Name
- b) Contact details

- View all the details of the doctors

The retrieved data:

- a) Name
- b) D-ID
- c) Qualifications
- d) Speciality
- e) Contact
- f) D.O.B

- View all the details of the tutors

The retrieved data:

- a) Name
- b) T-ID
- c) Subject
- d) Qualification
- e) Contact
- f) D.O.B

- View the health report of a particular kid

The retrieved data:

- a) K-ID (of the respective kid)

- b) Weight
- c) Height
- d) Blood group
- e) Food allergies

- View the name of kids and their blood groups

The retrieved data with the specified blood group:

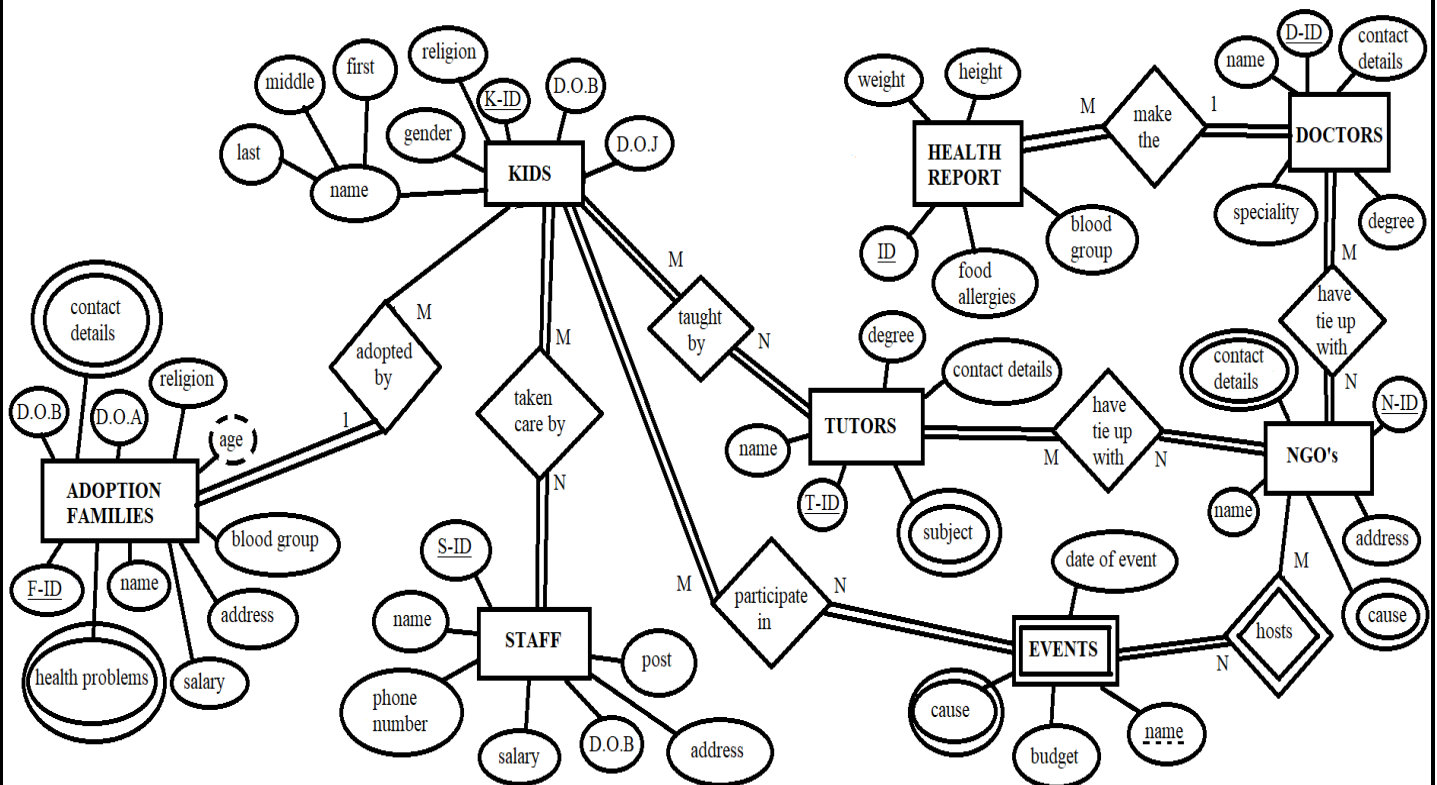
- a) Name
- b) Blood group

- View the budget and names of all the events conducted

The retrieved data:

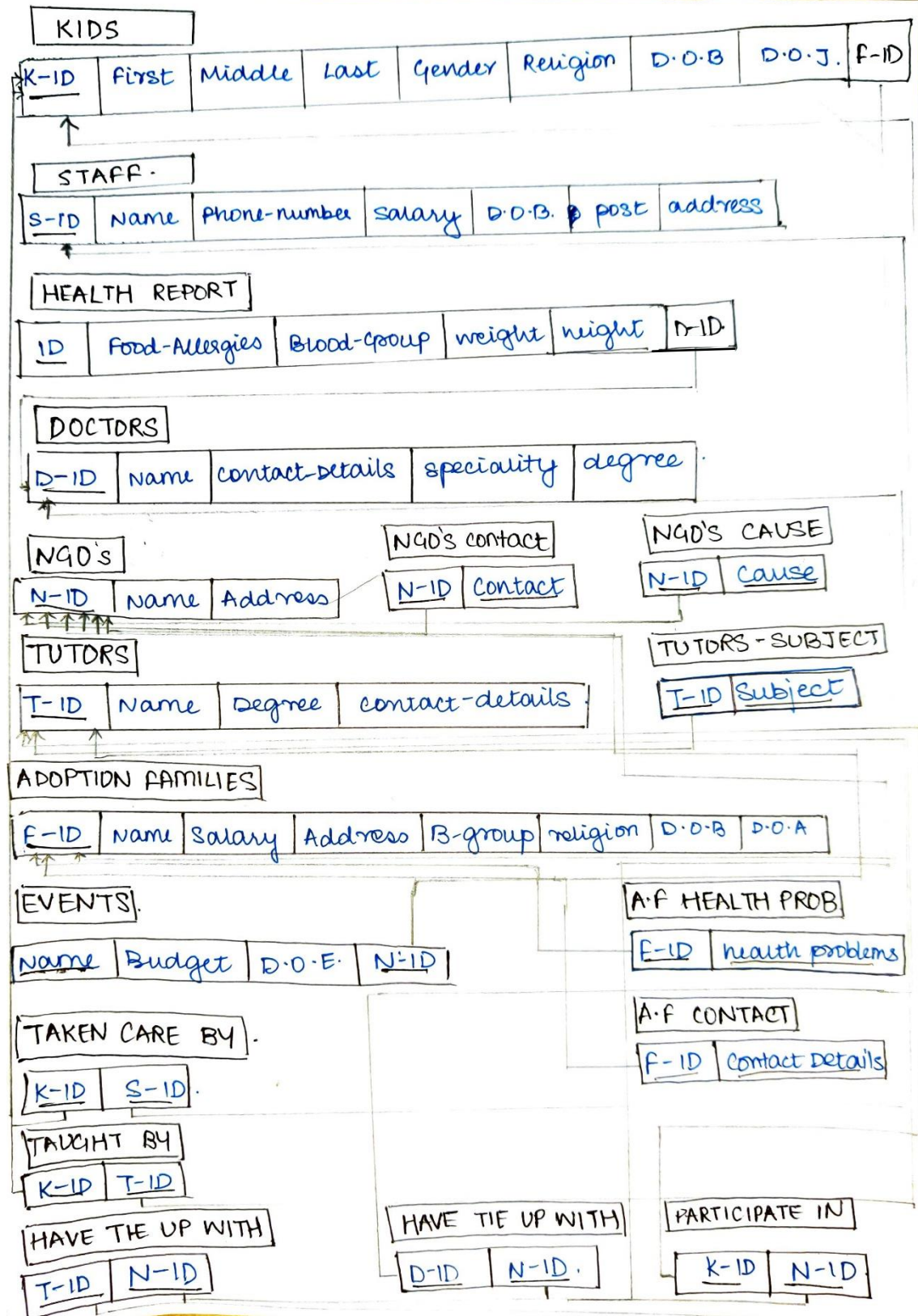
- a) Name
- b) Budget

E-R DIAGRAM:



4.

E-R DIAGRAM TO RELATIONAL MODEL



5(a) & 5(b).

ADOPTION FAMILIES

```
SQL> create table adoption_families (F_ID varchar(10) constraint af_pk primary key,
2      Name varchar(30) constraint af_nn NOT NULL,
3      Salary number (10),
4      Address varchar(40) constraint af_ann NOT NULL,
5      B_group varchar(4),
6      Religion varchar (20),
7      DOB date,
8      DOA date);

Table created.

SQL>
SQL> insert into adoption_families values('F1','Sunil',1200000,'A-101 Colaba, Mumbai','A+','Hindu',to_date('10091991','ddmmyyyy'),to_date('29042017','ddmmyyyy'));
1 row created.

SQL> insert into adoption_families values('F2','Amir',4000000,'F-403 Ring Road, Indore','B+','Islam',to_date('16041992','ddmmyyyy'),to_date('14102018','ddmmyyyy'));
1 row created.

SQL> insert into adoption_families values('F3','John',6200000,'R-202 Alkapuri, Vadodara','O+','Cristian',to_date('25071996','ddmmyyyy'),to_date('18022019','ddmmyyyy'));
1 row created.
```

```
SQL> select*from adoption_families;
```

F_ID	NAME	SALARY	ADDRESS	B_GR	RELIGION	DOB	DOA
F1	Sunil	1200000	A-101 Colaba, Mumbai	A+	Hindu	10-SEP-91	29-APR-17

F2	Amir	4000000	F-403 Ring Road, Indore	B+	Islam	16-APR-92	14-OCT-18
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F_ID	NAME	SALARY	ADDRESS	B_GR	RELIGION	DOB	DOA
F3	John	6200000	R-202 Alkapuri, Vadodara	O+	Cristian	25-JUL-96	18-FEB-19

KIDS

```
SQL> create table kids ( K_ID varchar(10) constraint k_pk primary key, FirstN varchar(15) constraint fn_nn NOT NULL,
  2      MiddleN varchar(15), LastN varchar (15), Gender varchar (10), Religion varchar (20),
  3      DOB date, DOJ date, F_ID varchar(10), CONSTRAINT k_fk FOREIGN KEY (F_ID) references adoption_families(F_ID));

Table created.

SQL>
SQL> insert into kids values('K1','Preeti','Sunil','Sharma','Male','Hindu',to_date('11102012','ddmmyyyy'),to_date('14092014','ddmmyyyy'),'F1');

1 row created.

SQL> insert into kids values('K2','Alifiya','Amir','Mallick','Female','Islam',to_date('04032013','ddmmyyyy'),to_date('17092015','ddmmyyyy'),'F2');

1 row created.

SQL> insert into kids values('K3','Charlie','John','Evans','Female','Cristian',to_date('20062014','ddmmyyyy'),to_date('15052016','ddmmyyyy'),'F3');

1 row created.
```

```
SQL> select*from kids;
```

K_ID	FIRSTN	MIDDLEN	LASTN	GENDER
RELIGION	DOB	DOJ	F_ID	
K1 Hindu	Preeti	Sunil	Sharma	Male
	11-OCT-12	14-SEP-14	F1	
K2 Islam	Alifiya	Amir	Mallick	Female
	04-MAR-13	17-SEP-15	F2	
K3 Cristian	Charlie	John	Evans	Female
	20-JUN-14	15-MAY-16	F3	

STAFF

```
SQL> create table staff(S_ID varchar(10) constraint s_pk primary key, Name varchar(30) constraint sn_nn NOT NULL,
2      Phone_Number number(10) constraint ph_u UNIQUE, Salary number (10), DOB date,
3      post varchar(20), address varchar(40) constraint sa_nn NOT NULL);

Table created.

SQL>
SQL> insert into staff values('S1','Rita','123456789','300000',to_date('1501996','ddmmyyyy'),'Secretary','B-24 Juhu, Mumbai');

1 row created.

SQL> insert into staff values('S2','Vijay','987654321','400000',to_date('01101994','ddmmyyyy'),'Manager','D-36 Chembur, Mumbai');

1 row created.

SQL> insert into staff values('S3','Kiara','908765432','600000',to_date('24121991','ddmmyyyy'),'HOD','E-48 Bandra, Mumbai');

1 row created.
```

```
SQL> select*from staff;
```

S_ID	NAME	PHONE_NUMBER	SALARY	DOB
S1	Rita	123456789	300000	15-JAN-96
Secretary	B-24 Juhu, Mumbai			
S2	Vijay	987654321	400000	01-OCT-94
Manager	D-36 Chembur, Mumbai			
S3	Kiara	908765432	600000	24-DEC-91
HOD	E-48 Bandra, Mumbai			

DOCTORS

```
SQL> create table Doctors(D_ID varchar(10) constraint d_pk primary key, Name varchar(30) constraint d_nn NOT NULL,  
2 Contact_details number(10) constraint cd_u UNIQUE, speciality varchar(30), degree varchar(30));  
Table created.  
SQL> insert into doctors values('D1','Diya','9216548760','ENT specialist','MBBS');  
1 row created.  
SQL> insert into doctors values('D2','Siddharth','9216542345','Cardiologist','MBBS');  
1 row created.  
SQL> insert into doctors values('D3','Anant','9211238760','Dermatologist','MBBS');  
1 row created.
```

```
SQL> select*from doctors;
```

D_ID	NAME	CONTACT_DETAILS
SPECIALITY	DEGREE	
D1	Diya	9216548760
ENT specialist	MBBS	
D2	Siddharth	9216542345
Cardiologist	MBBS	
D3	Anant	9211238760
Dermatologist	MBBS	

HEALTH REPORT

```
SQL> create table Health_Report( ID varchar(10) constraint hr_pk primary key, Food_Allergies varchar(30), Blood_Group varchar(5),
  2      Weight_kg number(3), Height_cm number(4), D_ID varchar(10), CONSTRAINT hr_fk FOREIGN KEY (D_ID)references Doctors(D_ID));

Table created.

SQL> insert into health_report values('HR1','Eggs','A+','32','139','D1');

1 row created.

SQL> insert into health_report values('HR2','None','B+','34','140','D2');

1 row created.

SQL> insert into health_report values('HR3','Milk','O+','36','142','D3');

1 row created.
```

```
SQL> select*from health_report;
```

ID	FOOD_ALLERGIES	BLOOD	WEIGHT_KG	HEIGHT_CM	D_ID
HR1	Eggs	A+	32	139	D1
HR2	None	B+	34	140	D2
HR3	Milk	O+	36	142	D3

AF_HEALTHP

```
SQL> create table AF_HealthP (F_ID varchar(10) , health_problems varchar(40),CONSTRAINT afhp_fk
FOREIGN KEY (F_ID)references adoption_families(F_ID), constraint afhp_pk primary key(F_ID,health
_problems));

Table created.

SQL> insert into AF_healthp values('F1','None');

1 row created.

SQL> insert into AF_healthp values('F2','Diabetes');

1 row created.

SQL> insert into AF_healthp values('F3','High Blood Pressure');

1 row created.
```

```
SQL> select*from AF_healthp;
```

F_ID	HEALTH_PROBLEMS
F1	None
F2	Diabetes
F3	High Blood Pressure

AF_CONTACT

```
SQL> create table AF_Contact (F_ID varchar(10) , contact_details number(10),CONSTRAINT afc_fk  
FOREIGN KEY (F_ID)references adoption_families(F_ID),constraint afc_pk primary key(F_ID,contact_details));
```

Table created.

```
SQL> insert into AF_contact values('F1','8976504312');
```

1 row created.

```
SQL> insert into AF_contact values('F2','9012345467');
```

1 row created.

```
SQL> insert into AF_contact values('F3','8032456721');
```

1 row created.

```
SQL> select*from AF_contact;
```

F_ID	CONTACT_DETAILS
F1	8976504312
F2	9012345467
F3	8032456721

NGO

```
SQL> create table NGO(N_ID varchar(10) constraint ngo_pk primary key, name varchar(30) constraint ngo_nn NOT NULL, address varchar(40) constraint ngoa_nn NOT NULL);
```

Table created.

```
SQL>
```

```
SQL> insert into NGO values('N1','Hearts','Santa Cruz, Mumbai');
```

1 row created.

```
SQL> insert into NGO values('N2','Anokha','Dadar, Mumbai');
```

1 row created.

```
SQL> insert into NGO values('N3','Fepsi','Western Suburbs, Mumbai');
```

1 row created.

```
SQL> select*from NGO;
```

N_ID	NAME	ADDRESS
N1	Hearts	Santa Cruz, Mumbai
N2	Anokha	Dadar, Mumbai
N3	Fepsi	Western Suburbs, Mumbai

NGO_CONTACT

```
SQL> create table NGO_Contact (N_ID varchar(10) , contact number(10) ,CONSTRAINT
ngoc_fk FOREIGN KEY (N_ID)references NGO(N_ID),constraint ngoc_pk primary key(N_I
D,contact));
```

Table created.

```
SQL> insert into NGO_Contact values('N1','9134657809');
```

1 row created.

```
SQL> insert into NGO_Contact values('N2','8934654567');
```

1 row created.

```
SQL> insert into NGO_Contact values('N3','8734654325');
```

1 row created.

```
SQL> select*from NGO_Contact;
```

N_ID	CONTACT
N1	9134657809
N2	8934654567
N3	8734654325

NGO_CAUSE

```
SQL> create table NGO_Cause (N_ID varchar(10) , cause varchar(40) ,CONSTRAINT
ngoca_fk FOREIGN KEY (N_ID)references NGO(N_ID),constraint ngoca_pk primary key
(N_ID, cause));
```

Table created.

```
SQL> insert into NGO_Cause values('N1','Child Abuse');
```

1 row created.

```
SQL> insert into NGO_Cause values('N2','Domestic Violence');
```

1 row created.

```
SQL> insert into NGO_Cause values('N3','Women Empowerment');
```

1 row created.

```
SQL> select*from NGO_Cause;
```

N_ID	CAUSE
N1	Child Abuse
N2	Domestic Violence
N3	Women Empowerment

TUTORS

```
SQL> create table tutors(T_ID varchar(10) constraint t_pk primary key, name varchar(30) constraint tn_nn NOT NULL, degree varchar(30),contact_details number(10) constraint tcd_u UNIQUE);
```

Table created.

```
SQL>
```

```
SQL> insert into tutors values('T1','Shreya','BEd','9085965432');
```

1 row created.

```
SQL> insert into tutors values('T2','Rahul','BEd','9287912324');
```

1 row created.

```
SQL> insert into tutors values('T3','Kareena','MEd','9476865841');
```

1 row created.

```
SQL> select*from tutors;
```

T_ID	NAME	DEGREE
CONTACT_DETAILS		
T1	Shreya	BEd
T2	Rahul	BEd
T3	Kareena	MEd

TUTORS_SUBJECT

```
SQL> create table tutors_subject(T_ID varchar(10), subject varchar(20) ,CONSTRAINT ts_fk FOREIGN KEY (T_ID)references tutors(T_ID), constraint ts_pk primary key(T_ID,subject));
```

Table created.

```
SQL> insert into tutors_subject values('T1','English');
```

1 row created.

```
SQL> insert into tutors_subject values('T2','Maths');
```

1 row created.

```
SQL> insert into tutors_subject values('T3','Science');
```

1 row created.

```
SQL> select*from tutors_subject;
```

T_ID	SUBJECT
T1	English
T2	Maths
T3	Science

EVENTS

```
SQL> create table events(name varchar(35) , Budget number(10), DOE timestamp(0),N_ID varchar(10), CONSTRAINT e_fk FOREIGN KEY (N_ID)references NGO(N_ID),constraint e_pk primary key(name,N_ID));
```

Table created.

```
SQL> insert into events values('Drawing/Painting Competition','15000',to_date('09012020','ddmmyyyy'),'N1');
```

1 row created.

```
SQL> insert into events values('Essay Writing Competion','20000',to_date('25022020','ddmmyyyy'),'N2');
```

1 row created.

```
SQL> insert into events values('Story Telling Competion','22000',to_date('18032020','ddmmyyyy'),'N3');
```

1 row created.

```
SQL> select*from events;
```

NAME	BUDGET
------	--------

DOE

N_ID

Drawing/Painting Competition	15000
09-JAN-20 12.00.00 AM	
N1	

Essay Writing Competition	20000
25-FEB-20 12.00.00 AM	
N2	

NAME	BUDGET
------	--------

DOE

N_ID

Story Telling Competition	22000
18-MAR-20 12.00.00 AM	
N3	

TAKEN_CARE_BY

```
SQL> create table taken_care_by (K_ID varchar(10), S_ID varchar(10), CONSTRAINT tcb_kfk FOREIGN KEY (K_ID)references kids(K_ID), CONSTRAINT tcb_sfk FOREIGN KEY (S_ID)references staff(S_ID),constraint tcb_pk primary key(K_ID,S_ID));
```

Table created.

```
SQL> insert into taken_care_by values('K1','S1');
```

1 row created.

```
SQL> insert into taken_care_by values('K2','S2');
```

1 row created.

```
SQL> insert into taken_care_by values('K3','S3');
```

1 row created.

```
SQL> select*from taken_care_by;
```

K_ID	S_ID
------	------

K1 S1

K2 S2

K3 S3

TAUGHT_BY

```
SQL> create table taught_by(K_ID varchar(10), T_ID varchar(10), CONSTRAINT tb_kfk FOREIGN KEY (K_ID)
references kids(K_ID), CONSTRAINT tb_tfk FOREIGN KEY (T_ID)references tutors(T_ID),constraint tb_tpk
primary key(K_ID,T_ID));
```

Table created.

```
SQL> insert into taught_by values('K1','T1');
```

1 row created.

```
SQL> insert into taught_by values('K2','T2');
```

1 row created.

```
SQL> insert into taught_by values('K3','T3');
```

1 row created.

```
SQL> select*from taught_by;
```

K_ID	T_ID
K1	T1
K2	T2
K3	T3

TIEUP_TUTOR

```
SQL> create table tieup_tutor(T_ID varchar(10), N_ID varchar(10), CONSTRAINT tt_tfk FOREIGN KEY (T_I
D)references tutors(T_ID), CONSTRAINT tt_nfk FOREIGN KEY (N_ID)references NGO(N_ID),constraint tt_tp
k primary key(T_ID,N_ID));
```

Table created.

```
SQL> insert into tieup_tutor values('T1','N1');
```

1 row created.

```
SQL> insert into tieup_tutor values('T2','N2');
```

1 row created.

```
SQL> insert into tieup_tutor values('T3','N3');
```

1 row created.


```
SQL> select*from tieup_tutor;
```

T_ID	N_ID
T1	N1
T2	N2
T3	N3

TIEUP_DOCTOR

```
SQL> create table tieup_doctor(D_ID varchar(10), N_ID varchar(10), CONSTRAINT td_tfk FOREIGN KEY (D_ID)references doctors(D_ID), CONSTRAINT td_nfk FOREIGN KEY (N_ID)references NGO(N_ID),constraint td_tpk primary key(D_ID,N_ID));
```

Table created.

```
SQL> insert into tieup_doctor values('D1','N1');
```

1 row created.

```
SQL> insert into tieup_doctor values('D2','N2');
```

1 row created.

```
SQL> insert into tieup_doctor values('D3','N3');
```

1 row created.

```
SQL> select*from tieup_doctor;
```

D_ID	N_ID
D1	N1
D2	N2
D3	N3

PARTICIPATE_IN

```
SQL> create table participate_in(K_ID varchar(10), N_ID varchar(10), CONSTRAINT pi_kfk FOREIGN  
KEY (K_ID)references kids(K_ID), CONSTRAINT pi_nfk FOREIGN KEY (N_ID)references NGO(N_ID),const  
raint pi_tpk primary key(N_ID,K_ID));
```

Table created.

```
SQL>
```

```
SQL> insert into participate_in values('K1','N1');
```

1 row created.

```
SQL> insert into participate_in values('K2','N2');
```

1 row created.

```
SQL> insert into participate_in values('K3','N3');
```

1 row created.

```
SQL> select*from participate_in;
```

K_ID	N_ID
K1	N1
K2	N2
K3	N3

Q6. UPDATE statements according to the functional requirements (refer to review 1 Q2)

1)After the regular checkups the kids health report data (eg. height, weight) needs to be modified if any changes occur.

```
SQL> Update health_report set weight_kg = 42, height_cm = 154 where ID = 'HR1' ;  
1 row updated.
```

2)If a staff member gets a promotion their post and salary should be modified accordingly

```
SQL> update staff set post = 'Cheif Manager',salary= 500000 where S_ID='S3';  
1 row updated.
```

3)If an adoptive family is relocating to a new address then the following details needs to be modified.

```
SQL> Update adoption_families set address = '121 c road, agra' where F_ID = 'F3';  
1 row updated.
```

4) If the event budget is changed due to any unforeseen reason, the budget needs to be modified.

```
SQL> Update events set budget = 56000 where N_ID = 'N3';  
1 row updated.
```

DELETE STATEMENTS

1)If any staff member resigns or is removed, then their data needs to be removed from the database.

```
SQL> Delete from taken_care_by where S_ID = 'S2' ;  
  
1 row deleted.  
  
SQL> Delete from staff where S_ID = 'S2' ;  
  
1 row deleted.
```

2) If a NGO withdraws their sponsorship from the orphanage, their data needs to be removed.

```
SQL> Delete from participate_in where N_ID = 'N2';  
  
1 row deleted.
```

```
SQL> Delete from tieup_doctor where N_ID = 'N2';  
  
1 row deleted.
```

```
SQL> Delete from events where N_ID = 'N2';  
  
1 row deleted.  
  
SQL> Delete from ngo where N_ID = 'N2';  
  
1 row deleted.
```

```
SQL> Delete from ngo_cause where N_ID = 'N2';  
  
1 row deleted.  
  
SQL> Delete from ngo_contact where N_ID = 'N2';  
  
1 row deleted.
```

3) If a doctor or a tutor resigns or is removed, then their data needs to be removed from the database (for doctor)

```
SQL> Delete from tieup_doctor where D_ID = 'D3';
1 row deleted.

SQL> Delete from health_report where D_ID = 'D3';
1 row deleted.

SQL> Delete from doctors where D_ID = 'D3';
1 row deleted.
```

4) If an event that was supposed to be conducted gets cancelled due unforeseen reasons, its details need to be removed.

```
SQL> DELETE FROM events WHERE name= 'Story Telling Competition';
1 row deleted.
```

SELECT STATEMENT

1) nvl

Print K_id, FirstN and not adopted for kids if they are not adopted

```
SQL> Select K_Id, FirstN ,nvl(F_ID,'Not adopted') from Kids;
```

K_ID	FIRSTN	NVL(F_ID, 'N
K1	Preeti	F1
K2	Alifiya	F2
K3	Charlie	F3

Update

Update those records with NoT adopted in kids where F_ID is null.

```
SQL> Update kids set F_ID = nvl(F_ID,'Not adopted') where F_ID is null ;  
  
0 rows updated.
```

2)nullif

Display the budget details for the events of all the ngos, if any value is ZERO, print as NULL value.

```
SQL> select nullif(budget,0) "Budget for the event" from events;  
  
Budget for the event  
-----  
                15000  
                20000  
                22000
```

3)one join query order by

Display ngo names event names in the asc order of the event budgets.

```
SQL> Select ngo.name, events.name from ngo join events on ngo.N_ID= events.N_ID order by  
events.budget asc ;  
  
NAME                NAME  
-----  
Hearts              Drawing/Painting Competition  
Anokha              Essay Writing Competition  
Fepsi               Story Telling Competition
```

4)one uncorrelated nested query

1) Display the name and address of the ngo where tutors have a Bed degree

```
SQL> select name ,address from NGO where N_ID in(select N_ID  from tieup_tutor where  
T_ID in(select T_ID from tutors where degree = 'BEd'));  
  
NAME                ADDRESS  
-----  
Hearts              Santa Cruz, Mumbai  
Anokha              Dadar, Mumbai
```

2) Display the speciality and name of the doctors where the health report they created has kids weight less than 34.

```
SQL> select speciality,name from doctors where D_ID != (select D_ID from Health_Report where weight_kg >34);
```

SPECIALITY	NAME
ENT specialist	Diya
Cardiologist	Siddharth

3) Delete

Delete the record of the ngo id and tid where the teacher teaches math.

```
SQL> Delete from tieup_tutor where t_id in(select t_id from tutors_subject where subject ='Maths');
```

```
1 row deleted.
```

5)One correlated query

Retrieve the staff name, salary and staff id who has the highest/max salary.

```
SQL> Select name, salary, s_id from staff outer where salary= (select max(salary) from staff where s_id= outer.s_id);
```

NAME	SALARY	S_ID
Kiara	500000	S3

6) one set operation

Retrieve all the contact details of tutors and staff.

```
SQL> Select phone_number from staff
2 UNION
3 select contact_details from tutors;
```

```
PHONE_NUMBER
```

```
-----
```

```
123456789
```

```
908765432
```

```
987654321
```

```
9085965432
```

```
9287912324
```

```
9476865841
```

```
6 rows selected.
```

7) one group by having where

Display the religion, number of families where the salary is higher than 300000 and the no. Of families is greater than or equal to one all grouped by religion.

```
SQL> select religion, count(*) AS "Number of families" from adoption_families where
salary > 300000 group by religion having count(*) >=1;
```

```
RELIGION          Number of families
```

```
-----
```

```
Islam              1
```

```
Cristian           1
```

8) left/right/outer join

Display the subjects and tutors name where the tutors name is of 5 letters.

```
SQL> Select tutors_subject.subject, tutors.name from tutors_subject left join tutors
on tutors_subject.T_ID =tutors.T_ID where tutors.name like '_____';
```

```
SUBJECT          NAME
```

```
-----
```

```
Maths            Rahul
```

Q7

Procedure with cursor

1. When the user types the doctor id, it directs to the report they have made and the blood group in that report is printed.

```
SQL> create or replace procedure health_kids(ki in doctors.d_id%type)
  2  is
  3  cursor dis_crs is
  4  select blood_group,d_id from health_report natural join doctors;
  5  dis_rec dis_crs%rowtype;
  6  BEGIN
  7
  8  open dis_crs;
  9  loop
 10  fetch dis_crs into dis_rec;
 11  if dis_rec.d_id= ki then
 12  dbms_output.put_line(dis_rec.blood_group);
 13  end if;
 14  end loop;
 15  end;
 16  /
```

Procedure created.

```
SQL> begin
  2  health_kids('D1');
  3  end;
A+
PL/SQL procedure successfully completed.
```

2. User enters the id of the user and based on the subject the tutor teaches is displayed.

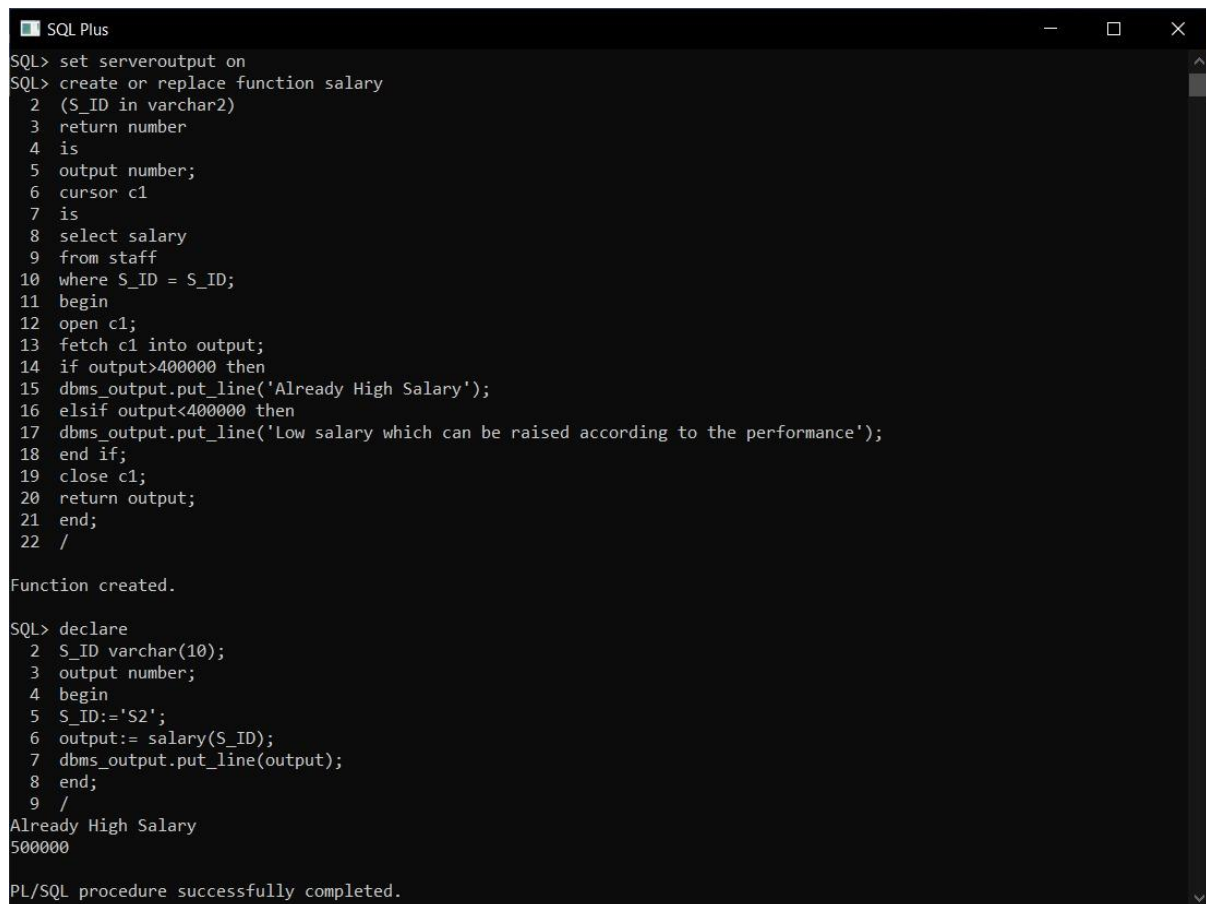
```
SQL> create or replace procedure tut_sub(tid in tutors_subject.t_id%type, tname in tutors.name%type, tsubject in tutors_subject.subject%type )
  2  is
  3  cursor sub_crs is
  4  select tutors.name,t_id,subject into tname,tid from tutors natural join tutors_subject;
  5  sub_rec sub_crs%rowtype;
  6  BEGIN
  7  open sub_crs;
  8  loop
  9  fetch sub_crs into sub_rec;
 10  if sub_rec.t_id=tid then
 11  dbms_output.put_line('Tutors subject: '||sub_rec.tutors_subject.subject);
 12  end if;
 13  end loop;
 14  end;
 15  /
```

Procedure created.

```
SQL> begin
  2  tut_sub('T1');
  3  end;
Tutors subject: Maths
PL/SQL procedure successfully completed.
```

Function with cursor

1.This function is created to display whether a staff member already has high salary (greater than 400000) or low salary (less than 400000). If he/she has a low salary then it can be incremented on the basis of their performance.



```
SQL Plus
SQL> set serveroutput on
SQL> create or replace function salary
 2  (S_ID in varchar2)
 3  return number
 4  is
 5  output number;
 6  cursor c1
 7  is
 8  select salary
 9  from staff
10  where S_ID = S_ID;
11  begin
12  open c1;
13  fetch c1 into output;
14  if output>400000 then
15  dbms_output.put_line('Already High Salary');
16  elsif output<400000 then
17  dbms_output.put_line('Low salary which can be raised according to the performance');
18  end if;
19  close c1;
20  return output;
21  end;
22  /

Function created.

SQL> declare
 2  S_ID varchar(10);
 3  output number;
 4  begin
 5  S_ID:='S2';
 6  output:= salary(S_ID);
 7  dbms_output.put_line(output);
 8  end;
 9  /
Already High Salary
500000

PL/SQL procedure successfully completed.
```

2.User enters the Id of the kid and based on the gender of the kid they are assigned for martial arts training.

If a girl- Taekwondo training and if a boy- Karate training.

```
SQL Plus
SQL> set serveroutput on
SQL> create or replace function training
  2 (k_ID in varchar2)
  3 return varchar2
  4 is
  5 output varchar2(30);
  6 cursor c2
  7 is
  8 select gender from kids where k_ID = k_id;
  9 begin
 10 open c2;
 11 fetch c2 into output;
 12 if output='Female' then
 13 dbms_output.put_line('Taekwondo training');
 14 elsif output='Male' then
 15 dbms_output.put_line('Karate training');
 16 end if;
 17 close c2;
 18 return output;
 19 end;
 20 /

Function created.

SQL> declare
  2 k_ID varchar(20);
  3 output varchar(30);
  4 BEGIN
  5 k_ID:='K1';
  6 output :=training(k_ID);
  7 dbms_output.put_line(output);
  8 end;
  9 /

Karate training
Male

PL/SQL procedure successfully completed.
```

Q8

Trigger 1

Q) When a staff leaves the job do the necessary process and update the elimination table.

```
SQL> create table elimination ( S_ID varchar(10) primary key, nName varchar(30), Phone_Number
number(10), post varchar(20),address varchar(40));
```

Table created.

```

SQL> set serveroutput on
SQL> create or replace trigger trig1
  2 after delete on staff referencing new as new old as old
  3 for each row
  4 begin insert into elimination values (:OLD.S_id ,:OLD.Name ,:OLD.Phone_Number ,:OLD.post,:OLD.address);
  5 END;
  6 /

Trigger created.

SQL> delete from taken_care_by where S_ID = 'S1';

1 row deleted.

SQL> delete from staff where S_ID= 'S1';

1 row deleted.

SQL> Select * from elimination;

```

S_ID	NNAME	PHONE_NUMBER	POST	ADDRESS
S1	Rita	123456789	Secretary	B-24 Juhu, Mumbai

Trigger 2

Q) While inserting a record if the adoption families salary is less than 10,00,000 than record cant be inserted as they arent eligible for adoption.

```

SQL> set serveroutput on
SQL> CREATE OR REPLACE TRIGGER cancelkidadoption
  2 AFTER INSERT ON adoption_families
  3 REFERENCING NEW AS n
  4 FOR EACH ROW
  5 declare
  6 rowcount int;
  7 begin
  8 if :n.salary <1000000 then
  9 dbms_output.put_line('Adoption cant happen as the family doesnt reach the minimum salary
requirement');
 10 end if;
 11 END;
 12 /

Trigger created.

```

```

SQL Plus
SQL> select*from adoption_families;

F_ID      NAME                                SALARY
-----
ADDRESS                                B_GR RELIGION                                DOB
-----
DOA
-----
F1         Sunil                                1200000
A-101 Colaba, Mumbai                                A+   Hindu                                10-SEP-91
29-APR-17

F2         Amir                                4000000
F-403 Ring Road, Indore                                B+   Islam                                16-APR-92
14-OCT-18

F_ID      NAME                                SALARY
-----
ADDRESS                                B_GR RELIGION                                DOB
-----
DOA
-----
F3         John                                6200000
R-202 Alkapuri, Vadodara                                O+   Cristian                                25-JUL-96
18-FEB-19

SQL> insert into adoption_families values('F4','Ananya',900000,'B-67 MI road, Jaipur','O-',
'Hindu',to_date('10051993','ddmmyyyy'),to_date('30102020','ddmmyyyy'));
Adoption cant happen as the family doesnt reach the minimum salary requirement

```

Trigger 3

Q)Give Notification to Admin of contact change of a NGO when its updated in the ngo_contact table.

```

SQL> set serveroutput on
SQL> CREATE OR REPLACE TRIGGER checkUpdatedContact
2  BEFORE UPDATE ON  ngo_contact
3  REFERENCING NEW AS ne
4  FOR EACH ROW
5  declare
6  rowcount int;
7  begin
8  dbms_output.put_line('The phone number has been changed to: '
9  || :ne.contact);
10 END;
11 /

```

```
SQL> select contact from ngo_contact;
```

```
CONTACT
-----
9134657809
8934654567
8734654325
```

```
SQL> update ngo_contact set contact =9829422987 where N_ID ='N2';
The phone number has been changed to: 9829422987
```

```
1 row updated.
```

```
SQL> select contact from ngo_contact;
```

```
CONTACT
-----
9134657809
9829422987
8734654325
```