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University nursery

By Students Names:

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Project idea

Due to the presence of many mothers on the university campus, whether students or teaching assistants, these mothers may suffer from regulating the time between work and taking care of their children, and they may feel neglected in their motherhood or work, and despite the presence of a nursery within the university, we may find some who do not know its existence or how to register, so we decided to Creating a program that helps mothers register their children in this nursery so that they can check on their children with the least possible effort in their work environment
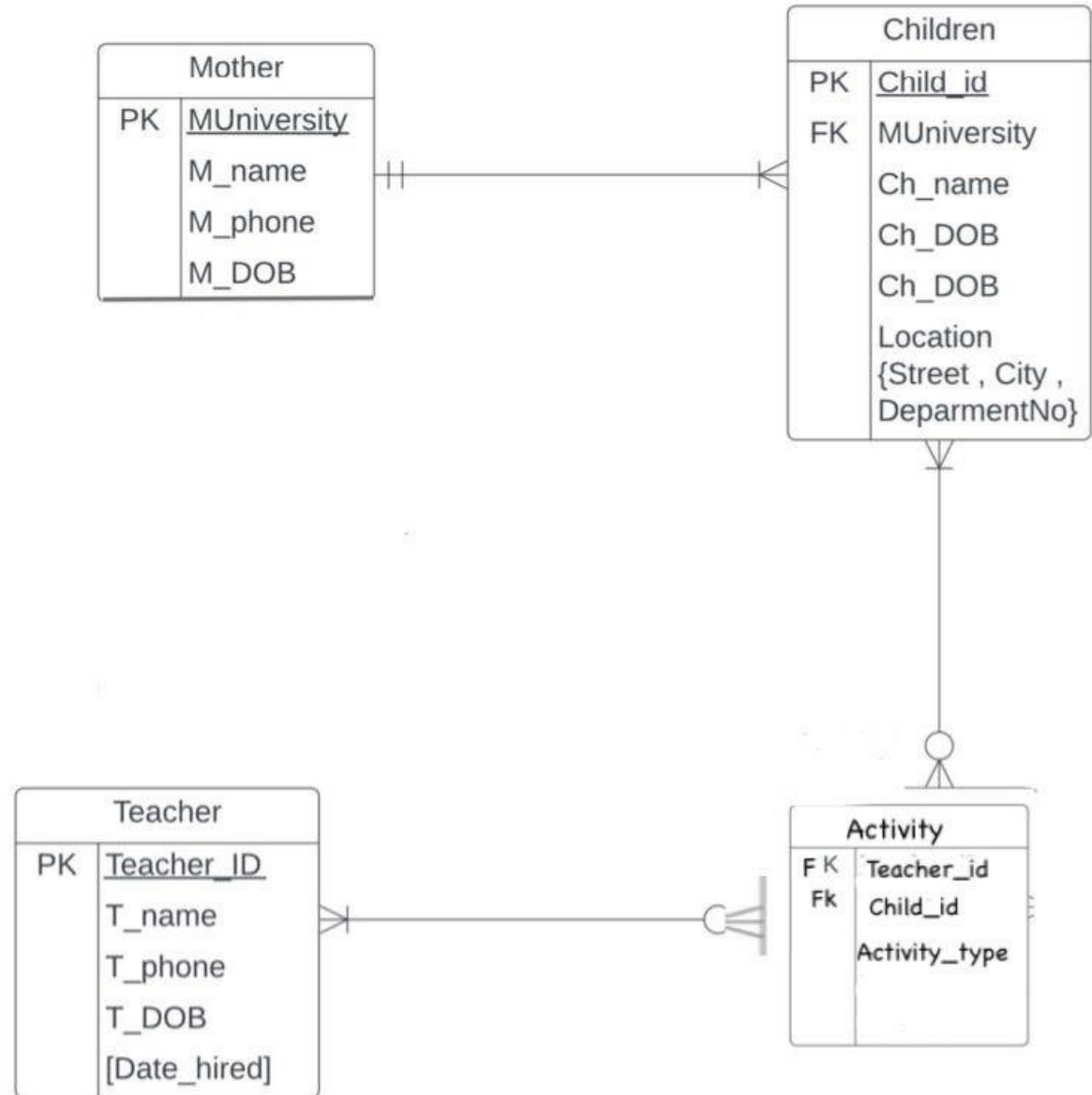
SYSTEM DESCRIPION

1-It allows mothers to register their children easily and smoothly

2-There is an option to specify the appropriate activities for each child and how to deal with it

3-The time of the child's presence is linked to the time of the mother's work

4-Preserving the child's instinct and nurturing his moral, mental and physical development in conditions that are normal for the family atmosphere and responsive to the requirements of Islam.

ER MODEL

RULES:

- **MOTHERS:**

- Mothers must register on our website in order to submit applications to register their children in daycare. They have to register by entering their name, their university ID and phone number.

- **CHILDREN:**

- Every child registered by the mother must record the name, date of birth, and phone number to contact in time of need, Location.

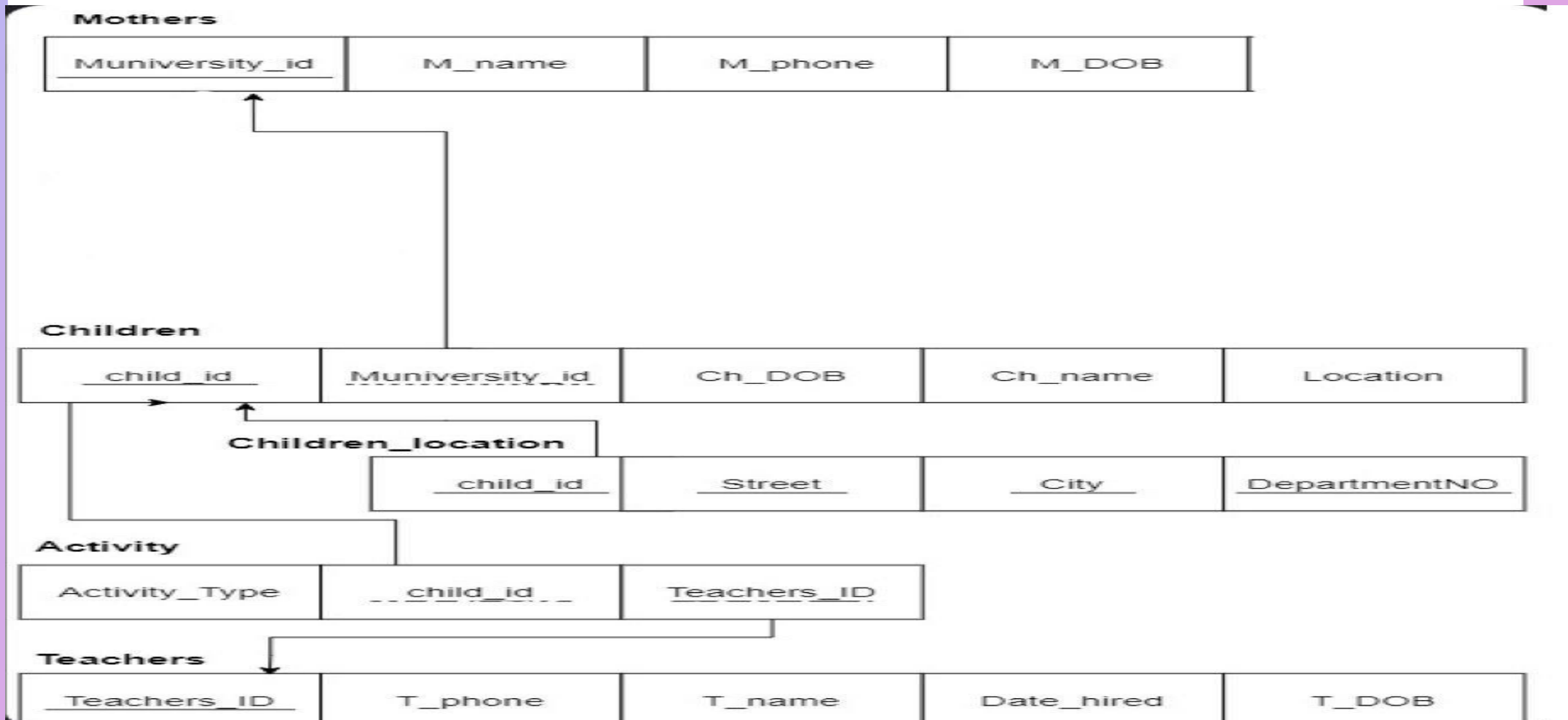- - Every child have one and only mother

- **ACTIVITY:**

- When registering their children with the nursery, mothers can choose the type of activity suitable for their child at the nursery

- - Every teacher must registered to the activities, and many children have many activities

- **TEACHERS:**

- Teachers must register by adding their ID number, name, date of birth, and phone number to contact them. Teachers register to apply for a job or to have their information on the nursery website.

RELATION PHASE2

Mothers

Muniversity_id	M_name	M_phone	M_DOB

Children

child_id	Muniversity_id	Ch_DOB	Ch_name	Location

Children_location

child_id	Street	City	DepartmentNO

Activity

Activity_Type	child_id	Teachers_ID

Teachers

Teachers_ID	T_phone	T_name	Date_hired	T_DOB

PHASE3 FUNCTIONAL DEPENDENCY

Functional Dependencies
MUniverstiy_ID → M_name, M_phone, M_DOB, Mother_type
Children_ID → Ch_DOB, Ch_name, Location
Teachers_ID → T_phone, T_name, Date_hired, T_DOB
Child_ID,Teachers_ID → Activity_Type

NORMILAZATION

UNF

Mothers (Muniverstit_id, M_name, M_phone, M_DOB, Mother_Type)

Student (S_ Muniverstit_id), Empoloyee (E_Muniverstit_id

It's all already in the 3 st NF

UNF

Teachers (Teacher_ID, T_phone, T_name, Date_hired, T_DOB)

It's already in the 3st NF

UNF

Children (Child_id, Muniverstit_id, CH_DOB, Ch_name, M_phone, Location)

1NF

Children (Child_id, CH_DOB, Ch_name)

Children_location(Child_id, Street, City, DeparmentNo)

Ch_Mother (Child_id, Muniverstit_id,)

3NF

It's already in the 3st NF

UNF

Activity(Child_id, Treachers_id, Activity_Type)

It's already in the 3st NF

SQL MOTHER


```
SQL Worksheet          ✎ Clear    ↘ Find    Actions ∨    💾 Save    Run ▶

1
2
3     CREATE TABLE mothers(
4         M_UNIVERSITY_ID  varchar(20)primary key,
5         M_phone number(20),
6         M_name varchar(20),
7         M_DOB varchar(20)
8     );
9     insert into mothers values ('MO200',05488540,'nabila','07/05/1992');
10    insert into mothers values ('MO201',05672599,'reem','15/09/2000');
11    insert into mothers values ('MO202',05487775,'amal','12/06/1995');
12    insert into mothers values ('MO203',05480020,'nada','06/03/1994');
13
14    select*from mothers;
15
16    CREATE TABLE children(
17      CH_ID  varchar(20),
18      child_name varchar(20) ,
19      child_DOB varchar(20),
20      M_UNIVERSITY_ID varchar(20),
21      foreign key(M_UNIVERSITY_ID) references mothers(M_UNIVERSITY_ID)
22    );
23    insert into children values ('CH100','Ahmad','22/04/2018','MO200');
24    insert into children values ('CH110','Tala','26/01/2017','MO200');
25    insert into children values ('CH120','Leen','12/08/2018','MO201');
```

1 row(s) inserted.

M_UNIVERSITY_ID	M_PHONE	M_NAME	M_DOB
MO200	5488540	nabila	07/05/1992
MO201	5672599	reem	15/09/2000
MO202	5487775	amal	12/06/1995
MO203	5480020	nada	06/03/1994

Download CSV

4 rows selected.

SQL CHILDREN:

SQL CHILDREN_LOCATION:


```
23   insert into children values ('CH120','Leen','12/08/2018','MO201');
24   insert into children values ('CH130','Naif','11/11/2018','MO202');
25   insert into children values ('CH140','lora','18/03/2018','MO203');
26
27   select*from children;
28   CREATE TABLE children_location(
29    Street varchar(20),
30    City varchar(20) ,
31    DepartmentNO varchar(20),
32    CH_ID  varchar(20)
33   );
34
35   alter table children_location
36   add foreign key (CH_ID) references children (CH_ID);
37
38   insert into children_location (Street, City, DepartmentNo,CH_ID) values ('abuziad','jeddah','21','CH100');
39   insert into children_location  (Street, City, DepartmentNo,CH_ID) values ('riahad','jeddah','M12','CH110');
40   insert into children_location  (Street, City, DepartmentNo,CH_ID) values ('faiha','jeddah','56','CH120');
41   insert into children_location (Street, City, DepartmentNo,CH_ID)  values ('aziz','jeddah','98','CH130');
42   insert into children_location (Street, City, DepartmentNo,CH_ID) values ('salama','jeddah','B44','CH140');
43   select*from children_location;
44
45   CREATE TABLE teacher (
46     Teacher_ID  varchar(20) primary key,
47
```

1 row(s) inserted.

STREET	CITY	DEPARTMENTNO	CH_ID
abuziad	jeddah	21	CH100
riahad	jeddah	M12	CH110
faiha	jeddah	56	CH120
aziz	jeddah	98	CH130
salama	jeddah	B44	CH140

Download CSV

SQL TEACHER:

SQL Worksheet   ⟋ Clear   ✏ Find   Actions ⌄   💾 Save   Run ▶

```
30
31
32    CREATE TABLE teacher (
33        Teacher_ID  varchar(20) primary key,
34
35        Teacher_name varchar(20) ,
36        Teacher_phone varchar(20),
37        Teacher_hired_date varchar(20),
38        Teacher_DOB  varchar(20)
39
40    );
41    insert into teacher(Teacher_ID,Teacher_name,Teacher_phone,Teacher_hired_date,Teacher_DOB) values('TE300','T.sara','054376400','1/02/2022','13/04/1998');
42    insert into teacher(Teacher_ID,Teacher_name,Teacher_phone,Teacher_hired_date,Teacher_DOB) values('TE320','T.weam','054376400','1/02/2012','11/02/2000');
43    insert into teacher(Teacher_ID,Teacher_name,Teacher_phone,Teacher_hired_date,Teacher_DOB) values('TE330','T.arwa','054376400','1/02/2020','13/08/1996');
44
45    select*from teacher;
46
47    CREATE TABLE activities(
48        CH_ID  varchar(20),
49        Teacher_ID  varchar(20),
50      activity_type  varchar(20));
51    insert into activities(CH_ID,Teacher_ID,activity_type) values('TE330','CH130','SPORT');
52    insert into activities(CH_ID,Teacher_ID,activity_type) values('TE320','CH100','SPORT');
53    insert into activities(CH_ID,Teacher_ID,activity_type) values('TE330','CH110','ART');
54    insert into activities(CH_ID,Teacher_ID,activity_type) values('TE300','CH120','ART');
```

1 row(s) inserted.

TEACHER_ID	TEACHER_NAME	TEACHER_PHONE	TEACHER_HIRED_DATE	TEACHER_DOB
TE300	T.sara	054376400	1/02/2022	13/04/1998
TE320	T.weam	054376400	1/02/2012	11/02/2000
TE330	T.arwa	054376400	1/02/2020	13/08/1996

Download CSV

3 rows selected.

Table created.

SQL ACTIVITIES:

SQL GROUP BY:

SQL Worksheet

```
1   select*from mothers;
2   select*from children;
3
4   SELECT COUNT (CH_ID),M_UNIVERSITY_ID as mother
5   from children
6   group by M_UNIVERSITY_ID;
```

COUNT(CH_ID)	MOTHER
2	MO202
2	MO203
4	MO200
2	MO201

Download CSV

4 rows selected.

SQL WHERE:


```
65    from children
66    group by mothers;
67
68    select *from activities
69    where activity_type='ART';
70
```

CH_ID	TEACHER_ID	ACTIVITY_TYPE
TE330	CH110	ART
TE300	CH120	ART

Download CSV

2 rows selected.

SQL ORDER BY:

Live SQL

SQL Worksheet   Clear   Find   Actions ⌄   Save   Run ▶

```
67
68   select *from activities
69   where activity_type='ART';
70
71   select * from children
72   order by child_DOB desc;
```

CH_ID	CHILD_NAME	CHILD_DOB	M_UNIVERSITY_ID
CH110	Tala	26/01/2017	MO200
CH100	Ahmad	22/04/2018	MO200
CH140	lora	18/03/2018	MO203
CH120	Leen	12/08/2018	MO201
CH130	Naif	11/11/2018	MO202

Download CSV

SQL MAX AGGREGATION:

SQL JOIN QUERY:

SQL SUBQUERY:

PROCEDER


```
10   Create or replace procedure Fteacher (TID IN CHAR, TName IN CHAR,Tphone IN CHAR , Thdate IN CHAR, TDOB IN CHAR)
11   as
12   cursor Tparent is
13   select *
14   from teacher
15   where Teacher_ID = TID  and TEACHER_NAME = TName and TEACHER_PHONE = Tphone and TEACHER_HIRED_DATE = Thdate and TEACHER_DOB = TDOB;
16   begin
17   for v_T in Tparent loop
18   dbms_output.put_line(' Teacher ID:  '||v_T.Teacher_ID||', Mother University ID:   '||v_T.TEACHER_NAME||'Teacher phone: '||v_T.TEACHER_PHONE||', Teacher hired date :   '||v_T.TEACHER_HIRED_DATE||', Teacher Date of birth: ' ||v_T.TEACHER_DOB);
19   end loop;
20   end Fteacher;
21
22   exec Fteacher ('TE300','T.sara','054376400','1/02/2022','13/04/1998');
23   exec Fteacher('TE320','T.weam','054376400','1/02/2012','11/02/2000');
24   exec Fteacher('TE330','T.arwa','054376400','1/02/2020','13/08/1996');
```

```
Statement processed.
 Teacher ID:  TE300, Mother University ID:   T.saraTeacher phone: 054376400, Teacher hired date :   1/02/2022, Teacher Date of birth: 13/04/1998

Statement processed.
 Teacher ID:  TE320, Mother University ID:   T.weamTeacher phone: 054376400, Teacher hired date :   1/02/2012, Teacher Date of birth: 11/02/2000

Statement processed.
 Teacher ID:  TE330, Mother University ID:   T.arwaTeacher phone: 054376400, Teacher hired date :   1/02/2020, Teacher Date of birth: 13/08/1996
```

```
5    from "ACTIVITIES";
6
7
8    Create or replace procedure Factivites (CID IN CHAR, TID IN CHAR,Atype IN CHAR )
9    as
10   cursor Aparent is
11   select *
12   from activities
13   where CH_ID = CID and Teacher_ID  = TID and activity_type = Atype;
14   begin
15   for v_A in Aparent loop
16   dbms_output.put_line(' Child ID:  '||v_A.CH_ID||' Teacher ID:  '||v_A.Teacher_ID ||', Activity type: ' ||v_A.activity_type );
17   end loop;
18   end Factivites;
19
20   exec Factivites ('TE330','CH130','SPORT');
21   exec Factivites ('TE320','CH100','SPORT');
22   exec Factivites ('TE330','CH110','ART');
23   exec Factivites ('TE300','CH120','ART');
24   exec Factivites ('TE300','CH140','SPORT');
```

```
Statement processed.
 Child ID:  TE330 Teacher ID:  CH130, Activity type: SPORT

Statement processed.
 Child ID:  TE320 Teacher ID:  CH100, Activity type: SPORT

Statement processed.
 Child ID:  TE330 Teacher ID:  CH110, Activity type: ART

Statement processed.
 Child ID:  TE300 Teacher ID:  CH120, Activity type: ART

Statement processed.
 Child ID:  TE300 Teacher ID:  CH140, Activity type: SPORT
```

```
27   exec FMOTHERS ('MO203',05480020,'nada','06/03/1994');
28
```

```
Statement processed.
 Mother University ID: MO200
 Mother phone: 5488540
 Mother name: nabila
 Mother Date of birth: 07/05/1992

Statement processed.
 Mother University ID: MO201
 Mother phone: 5672599
 Mother name: reem
 Mother Date of birth: 15/09/2000

Statement processed.
 Mother University ID: MO202
 Mother phone: 5487775
 Mother name: amal
 Mother Date of birth: 12/06/1995

Statement processed.
 Mother University ID: MO203
 Mother phone: 5480020
 Mother name: nada
 Mother Date of birth: 06/03/1994
```

UPDATE PROCEDER

PROCEDURE

```
Statement processed.
 Child ID: CH140
 Child name: lora
 Child Date of birth: 18/03/2018
 Mother University ID: MO203
 Child ID: CH140
 Child name: lora
 Child Date of birth: 18/03/2018
 Mother University ID: MO203
```

```
Statement processed.
 Child ID: CH100
 Child name: Ahmad
 Child Date of birth: 22/04/2018
 Mother University ID: MO200
 Child ID: CH100
 Child name: Ahmad
 Child Date of birth: 22/04/2018
 Mother University ID: MO200

Statement processed.
 Child ID: CH110
 Child name: Tala
 Child Date of birth: 26/01/2017
 Mother University ID: MO200
 Child ID: CH110
 Child name: Tala
 Child Date of birth: 26/01/2017
 Mother University ID: MO200

Statement processed.
 Child ID: CH120
 Child name: Leen
 Child Date of birth: 12/08/2018
 Mother University ID: MO201
 Child ID: CH120
 Child name: Leen
 Child Date of birth: 12/08/2018
 Mother University ID: MO201

Statement processed.
 Child ID: CH130
 Child name: Naif
 Child Date of birth: 11/11/2018
 Mother University ID: MO202
 Child ID: CH130
 Child name: Naif
 Child Date of birth: 11/11/2018
 Mother University ID: MO202
```