



AMERICAN INTERNATIONAL UNIVERSITY–BANGLADESH (AIUB)

FACULTY OF SCIENCE & TECHNOLOGY

Supervised By

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Submitted By

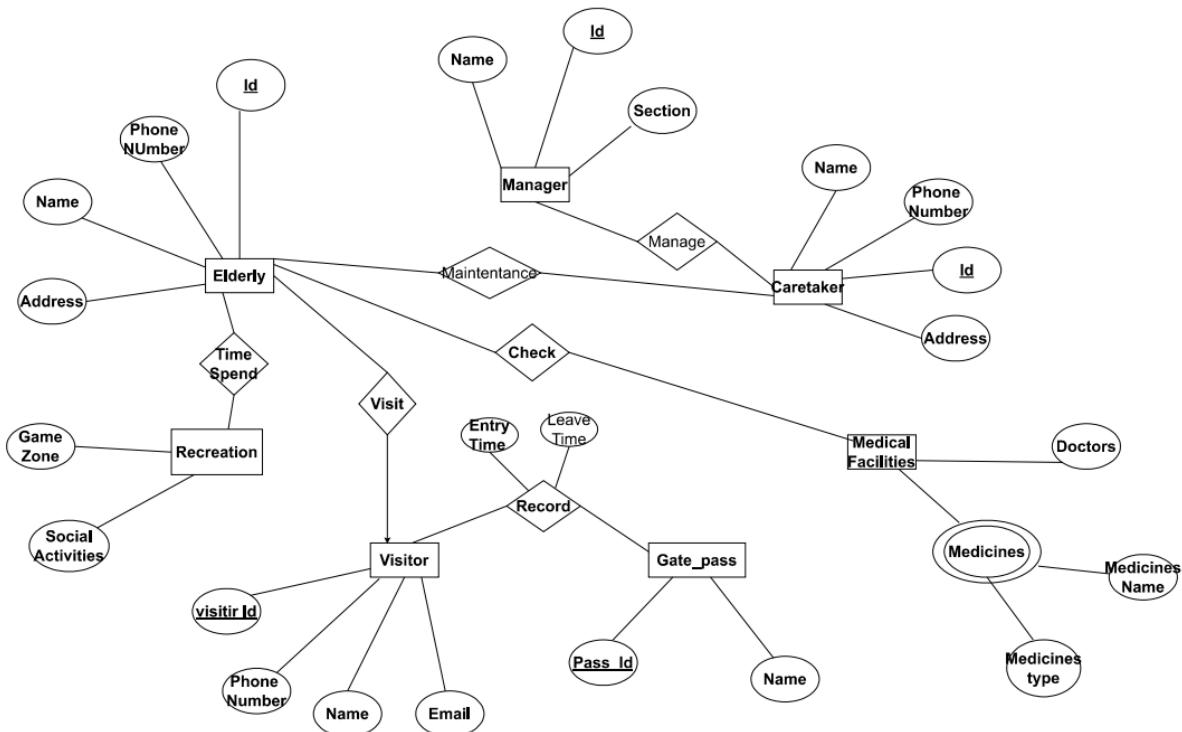
Name	ID
ALIF HOSSAIN TALHA	21-44923-2
MD MOSTOFA HASIB	21-44938-2
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Old age home

Scenario:

In an old age home management system, a caretaker takes care of many elderlies living in the old age home. A caretaker has several attributes which includes ID, name, phone number and address. Similarly, an elderly also has several attributes which are name, phone number and address. A visitor is anyone who visits the old age home and a visitor is only allowed to visit only one elderly, a visitor has several attributes such as visitor ID, name, phone number and email. A manager has several tasks which include overseeing caretakers. Manager has many attributes which includes ID, name and section. There are many recreational activities that an elderly can participate which includes game zone and social activities. There are doctors and nurses who takes care of the medical needs of the elderly. Before entering into the old age system, a visitor has to provide their respective ID and name.

ER Diagram:



Old age home

Normalization

Manage

UNF: 1st: (C_name , C_Id , Area , District ,M_name,M_Id,Section)

1NF:1st : M_Id, C_Id, M_name, C_name, Area , District , Section

2NF:1st : M_Id , Section

2nd : C_Id , C_name ,Area , District

3rd : M_Id , M_name

4th : M_Id , C_Id

3NF: **1st:** M_Id , Section

2nd : C_Id , C_name

3rd : Area , District

4th : M_Id , M_name

5th: M_Id , C_Id

Manager Final Table

1st: M_Id , Section

2nd : C_Id , C_name

3rd : Area , District

4th : M_Id , M_name

5th: M_Id , C_Id

Record

UNF: **1st:** (Pass_Id , P_name , V_Id , VPhone_Number , V_Name , V_email)

1NF: **1st** : Pass_Id , V_Id , VPhone_Number , P_name , V_Name , V_email

2NF: **1st** : V_Id , V_Name , V_email , VPhone_Number , Pass_Id

2nd : Pass_Id , P_name

3NF: **1st:** V_Id , V_Name , V_email

2nd : Pass_Id , P_name

3rd : V_Id , V_Name , VPhone_Number

4th : Pass_Id , V_Id,

Time Spend

UNF: 1st: (E_id , E_name , Phone_Number , E_area , E_district , Game_zone , Social_act)

1NF: 1st : E_id , E_name , Phone Number , E_area , E_district , Game_zone , Social_act

2NF: 1st : E_id , E_name , Phone Number

2nd : E_id , E_area , E_district

3NF: 1st: E_area , E_district

Visit

UNF: 1st: (E_id , E_name , E_Phone_Number , E_area , E_district , V_Id , V_Name , V_email , Phone_Number)

1NF: 1st : E_id , E_name , E Phone Number , E_area , E_district , V_Id , V_Name , V_email , V Phone Number

2NF: 1st : V_Id , V_Name , V_email , V Phone Number

2nd : E_id , E_name , V Phone Number

3rd : E_id , E_area , E_district

3NF: 1st: V_Id , V_Name , V_email , V Phone Number

2nd : E_area , E_district

3rd : E_id , V_Id

4th : E_id , E_name

Maintenance

UNF: 1st: (C_name , C_Id , Area , District , E_id , E_name , E_Phone_Number ,
E_area , E_district)

1NF:1st : C_name , C_Id , Area , District , E_id , E_name , E_Phone_Number ,
E_area , E_district

2NF:1st : C_Id , C_name , Area , District

2nd : E_id , E_name , E_area , E_district

3rd : E_id , E_Phone_Number

4th : C_Id , E_id

3NF: 1st: C_Id , C_name

2nd : E_id , E_name , C_Id , Area

3rd : Area , District

4th : E_area , E_district

5th : C_Id , E_id

Check

UNF: 1st: (E_id , E_name , E_Phone_Number , E_area , E_district , Doctors ,
Medicines_Name , Medicines_type)

1NF:1st : E_id , E_name , E_Phone_Number , E_area , E_district , Doctors ,
Medicines_Name , Medicines_type

2NF:1st : E_id , E_name , E_area , E_district , E_Phone_Number

2nd : E_id , Doctors , Medicines_Name , Medicines_type

3th : E

id , E_name ,Doctors

3NF: 1st: E_id , E_name, E Phone Number

2nd : E area , E_district

3rd : E id , Doctors

4th : E id , Medicines_Name

Final Table

1 V_Id , V_Name , V Phone Number

2 E_area , E_district

3 E_id , E_name, E Phone Number

4 : E_id , E_name , C_Id , Area

5. E_id , E_name

6. Pass_Id, V_Id,

7. V_Id, V_Name , V_email

8. C_Id , C_name

9. : M_Id , M_name

Screenshots:

ALL INFORMATION

AutoSave (Off) New Microsoft Word Document Search (Alt+Q)

MD MOSTOFA HASIB

Old age home

Scenario:

In an old age home management system, a caretaker takes care of many elderlyies living in the old age home. A caretaker has several attributes which includes ID, name, phone number and address. Similarly, an elderly also has several attributes which are name, phone number and address. A visitor is anyone who visits the old age home and a visitor is only allowed to visit only one elderly, a visitor has several attributes such as visitor ID, name, phone number and email. A manager has several tasks which include overseeing caretakers. Manager has many attributes which includes ID, name and section. There are many recreational activities that an elderly can participate which includes game zone and social activities. There are doctors and nurses who takes care of the medical needs of the elderly. Before entering into the old age system, a visitor has to provide their respective ID and name.

ER Diagram:

```

    erDiagram {
        class Elderly {
            string id;
            string name;
            string address;
            string phone;
        }
        class Manager {
            string id;
            string name;
            string section;
        }
        class Visitor {
            string id;
            string name;
            string address;
            string phone;
        }
        class Caretaker {
            string id;
            string name;
            string address;
            string phone;
        }

        Elderly }o--o{ Manager : "Oversee"
        Elderly }o--o{ Visitor : "Visit"
        Elderly }o--o{ Caretaker : "Check"
        Manager }o--o{ Caretaker : "Manage"
        Caretaker }o--o{ Elderly : "Attend"
    }
  
```

Page 1 of 4 388 words 27°C Cloudy 4:37 PM 4/20/2022

Normalization part

The screenshot shows a Microsoft Word document titled "New Microsoft Word Document". The ribbon menu is visible at the top. The main content area contains the following text:

Manage

UNF: 1st: (C_name , C_Id , Area , District ,M_name,M_Id,Section)
1NF:1st : M_Id , C_Id , M_name, C_name, Area , District , Section
2NF:1st : M_Id , Section
 2nd : C_Id , C_name ,Area , District
 3rd : M_Id , M_name
 4th : M_Id , C_Id
3NF: 1st: M_Id , Section
 2nd : C_Id , C_name
 3rd : Area , District
 4th : M_Id , M_name
 5th: M_Id , C_Id

At the bottom of the screen, the Windows taskbar is visible, showing the date and time as 4/20/2022 4:37 PM.

The screenshot shows a Microsoft Word document titled "New Microsoft Word Document". The ribbon menu is visible at the top. The main content area contains the following text:

Record

UNF: 1st: (Pass_Id , R_name , Visitor_Id , Phone_Number,V_Name , V_email)
1NF:1st : Pass_Id , V_Id , Phone_Number,P_name , V_Name , V_email
2NF:1st : V_Id , V_Name , V_email , Phone_Number,Pass_Id
 2nd : Pass_Id , P_name
3NF: 1st:

Time Spend

UNF: 1st: (E_id , E_name , Phone_Number , E_area , E_district , Game_zone , Social_act)
1NF:1st : E_id , E_name , Phone_Number , E_area , E_district , Game_zone , Social_act
2NF:1st : E_id , E_name , Phone_Number
 2nd : E_id , E_area , E_district
3NF: 1st: E_area , E_district

At the bottom of the screen, the Windows taskbar is visible, showing the date and time as 4/20/2022 4:37 PM.

Table Create

User: SCOTT
Home > SQL > SQL Commands
Autocommit Display 20 Save Run

```
create table manager( M_name varchar2(30), M_Id number(10) primary key not null, Section varchar2(30));
create table caretaker( C_Name varchar2(30), C_Id number(10) primary key not null, C_PhoneNumber number(30), C_Area varchar2(200),
C_District varchar2(20) );
create table elderly(E_name varchar2(30),E_Id number(10)primary key not null,E_PhoneNumber number(30), E_Area varchar2(30),E_District
varchar2(30));
create table medical( Doctors varchar2(30), Medicine_name varchar2(30),Medicine_type varchar2(30));
create table gate_pass( Pass_Id number(10) primary key not null, P_Name varchar2(30) );
```

Results Explain Describe Saved SQL History

Table created.

0.00 seconds



User: SCOTT
Home > SQL > SQL Commands
Autocommit Display 20 Save Run

```
create table manager( M_name varchar2(30), M_Id number(10) primary key not null, Section varchar2(30));
create table caretaker( C_Name varchar2(30), C_Id number(10) primary key not null, C_PhoneNumber number(30), C_Area varchar2(200),
C_District varchar2(20) );
create table elderly(E_name varchar2(30),E_Id number(10)primary key not null,E_PhoneNumber number(30), E_Area varchar2(30),E_District
varchar2(30));
create table medical( Doctors varchar2(30), Medicine_name varchar2(30),Medicine_type varchar2(30));
create table gate_pass( Pass_Id number(10) primary key not null, P_Name varchar2(30) );
create table visitor (V_id number(10),V_Name varchar2(30),VPhone_Number number(10),V_email varchar2(30));
create table recreation( Game_Zone varchar2(30), Social_act varchar2(30));
```

Results Explain Describe Saved SQL History

Table created.

0.02 seconds



Data Insert

SQL Commands

Autocommit Display 20 Save Run

```
create table elderly_info(E_Id number(10)primary key not null, E_Area varchar2(200),E_district varchar2(30));  
insert into manager values('TALHA',101,'A1');  
insert into manager values('HASIB',102,'A2');  
insert into manager values('WASHIK',103,'A3');  
insert into manager values('EMA',104,'A4');  
SELECT *  
FROM manager;
```

Results Explain Describe Saved SQL History

M_NAME	M_ID	SECTION
TALHA	101	A1
HASIB	102	A2
WASHIK	103	A3
EMA	104	A4

4 rows returned in 0.00 seconds CSV Export

Language: en-us Application Express 2.1.0.00.39
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SQL Commands

Autocommit Display 20 Save Run

```
SELECT *  
FROM manager;  
  
insert into caretaker values('Md Islam',1111,01791,'Mirpur','Dhaka','A1');  
insert into caretaker values('Tania Akter',1112,01792,'Mirpur1','Dhaka','A4');  
insert into caretaker values('Nipa Islam',1113,01793,'Mirpur2','Dhaka','A1');  
insert into caretaker values('Ismail Hasan',1114,01794,'Mirpur3','Dhaka','A4');  
  
select *  
from caretaker;
```

ORACLE Database Express Edition

User: SCOTT

Home > SQL > SQL Commands

Results Explain Describe Saved SQL History

C_NAME	C_ID	C_PHONENUMBER	C_AREA	C_DISTRICT	SECTION
Md Islam	1111	1791	Mirpur	Dhaka	A1
Tania Akter	1112	1792	Mirpur1	Dhaka	A4
Nipa Islam	1113	1793	Mirpur2	Dhaka	A1
Ismail Hasan	1114	1794	Mirpur3	Dhaka	A4

4 rows returned in 0.00 seconds CSV Export

25°C Haze 12:23 AM 4/21/2022

SQL Commands

User: SCOTT

Home > SQL > SQL Commands

Autocommit

```
from caretaker;

insert into elderly values('Md Ali',0001,0175588,'NIKUNJA 1','DHAKA');
insert into elderly values('Mrs Asma',0002,0175599,'NIKUNJA 2','DHAKA');
insert into elderly values('Abdul Bari',0003,0175588,'NIKUNJA 1','DHAKA');
insert into elderly values('Younus Ali',0004,0175511,'NIKUNJ 2','DHAKA');

select * from elderly;
```

Results Explain Describe Saved SQL History

E_NAME	E_ID	E_PHONENUMBER	E_AREA	E_DISTRICT
Md Ali	1	175588	NIKUNJA 1	DHAKA
Mrs Asma	2	175599	NIKUNJA 2	DHAKA
Abdul Bari	3	175588	NIKUNJA 1	DHAKA
Younus Ali	4	175511	NIKUNJ 2	DHAKA

4 rows returned in 0.00 seconds [CSV Export](#)

25°C Haze 12:24 AM 4/21/2022

SQL Commands

User: SCOTT

Home > SQL > SQL Commands

Autocommit

```
from elderly;

insert into medical values('Dr Misra','NAPA','Type1');
insert into medical values('Dr Muna','NAPA Extra','Type2');
insert into medical values('Dr Yeasin','Biotin','Type3');
insert into medical values('Dr Alom','Ativan','Type4');

select * from medical;
insert into gate_pass values(01,'Rakib');
```

Results Explain Describe Saved SQL History

DOCTORS	MEDICINE_NAME	MEDICINE_TYPE
Dr Misra	NAPA	Type1
Dr Muna	NAPA Extra	Type2
Dr Yeasin	Biotin	Type3
Dr Alom	Ativan	Type4

4 rows returned in 0.00 seconds [CSV Export](#)

25°C Haze 12:24 AM 4/21/2022

SQL Commands

User: SCOTT

Home > SQL > SQL Commands

Autocommit

```
insert into gate_pass values(01,'Rakib');
insert into gate_pass values(02,'Karim');
insert into gate_pass values(03,'Naim');
insert into gate_pass values(04,'Razi');

select * from gate_pass;

insert into visitor values(01,'Rakib',017,'rakib@gmail.com');
insert into visitor values(02,'Karim',018,'karim@gmail.com');
```

Results Explain Describe Saved SQL History

PASS_ID	P_NAME
1	Rakib
2	Karim
3	Naim
4	Razi

4 rows returned in 0.00 seconds [CSV Export](#)

Windows Taskbar: 25°C Haze, various icons, 12:25 AM 4/21/2022

SQL Commands

User: SCOTT

Home > SQL > SQL Commands

Autocommit

```
insert into visitor values(01,'Rakib',017,'rakib@gmail.com');
insert into visitor values(02,'Karim',018,'karim@gmail.com');
insert into visitor values(03,'Naim',014,'naim@gmail.com');
insert into visitor values(04,'Razi',019,'razi@gmail.com');

select * from visitor;

insert into recreation values('Ludu',' Singing');
insert into recreation values('Uno','Movie watching');
insert into recreation values('Chess','Acting');
```

Results Explain Describe Saved SQL History

V_ID	V_NAME	VPHONE_NUMBER	V_EMAIL
1	Rakib	17	rakib@gmail.com
2	Karim	18	karim@gmail.com
3	Naim	14	naim@gmail.com
4	Razi	19	razi@gmail.com

4 rows returned in 0.00 seconds [CSV Export](#)

Windows Taskbar: 25°C Haze, various icons, 12:25 AM 4/21/2022

SQL Commands

127.0.0.1:8080/apex/f?p=4500:1003:2589491599487424::NO::

User: SCOTT

ORACLE Database Express Edition

Home > SQL > SQL Commands

Autocommit Display 20 Save Run

```
select * from visitor;
insert into recreation values('Ludu',' Singing');
insert into recreation values('Uno','Movei watching');
insert into recreation values('Chess','Acting');
insert into recreation values('Table tennis','Danching');

select * from recreation;
```

Results Explain Describe Saved SQL History

GAME_ZONE	SOCIAL_ACT
Ludu	Singing
Uno	Movei watching
Chess	Acting
Table tennis	Danching

4 rows returned in 0.02 seconds CSV Export

25°C Haze 12:25 AM 4/21/2022

Describe Tables

User: SCOTT

Home > SQL > SQL Commands

Autocommit Display 20 Save Run

```
select * from recreation;
```

Description of All the tables:

```
desc manager;
desc caretaker;
desc elderly;
desc medical;
desc gate_pass;
desc visitor;
desc recreation;
```

Results Explain Describe Saved SQL History

Object Type TABLE Object MANAGER

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
MANAGER	M_NAME	Varchar2	30	-	-	-	✓	-	-
	M_ID	Number	-	10	0	1	-	-	-
	SECTION	Varchar2	30	-	-	-	✓	-	-

1 - 3

25°C Haze 12:25 AM 4/21/2022

User: SCOTT

Home > SQL > SQL Commands

Autocommit Display 20 Save Run

```
select * from recreation;
```

Description of All the tables:

```
desc manager;
desc caretaker;
desc elderly;
desc medical;
desc gate_pass;
desc visitor;
desc recreation;
```

Results Explain Describe Saved SQL History

Object Type TABLE Object CARETAKER

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
CARETAKER	C_NAME	Varchar2	30	-	-	-	✓	-	-
	C_ID	Number	-	10	0	1	-	-	-
	C_PHONENUMBER	Number	-	30	0	-	✓	-	-
	C_AREA	Varchar2	200	-	-	-	✓	-	-
	C_DISTRICT	Varchar2	20	-	-	-	-	-	-

25°C Haze 12:25 AM 4/21/2022

SQL Commands

Home > SQL > SQL Commands

Autocommit Display 20

```
Description of All the tables:
desc manager;
desc caretaker;
desc elderly;
desc medical;
desc gate_pass;
desc visitor;
desc recreation;
```

Results Explain Describe Saved SQL History

Object Type TABLE Object ELDERLY

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
ELDERLY	E_NAME	Varchar2	30	-	-	-	✓	-	-
	E_ID	Number	-	10	0	1	-	-	-
	E_PHONENUMBER	Number	-	30	0	-	✓	-	-
	E_AREA	Varchar2	30	-	-	-	✓	-	-
	E_DISTRICT	Varchar2	30	-	-	-	✓	-	-

1 - 5

Application Express 2.1.00.39

25°C Haze

12:25 AM 4/21/2022

SQL Commands

Home > SQL > SQL Commands

Autocommit Display 20

```
Description of All the tables:
desc manager;
desc caretaker;
desc elderly;
desc medical;
desc gate_pass;
desc visitor;
desc recreation;
```

Results Explain Describe Saved SQL History

Object Type TABLE Object MEDICAL

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
MEDICAL	DOCTORS	Varchar2	30	-	-	-	✓	-	-
	MEDICINE_NAME	Varchar2	30	-	-	-	✓	-	-
	MEDICINE_TYPE	Varchar2	30	-	-	-	✓	-	-

1 - 3

Language: en-us

Application Express 2.1.00.39

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25°C Haze

12:25 AM 4/21/2022

SQL Commands

User: SCOTT

Home > SQL > SQL Commands

Autocommit Display 20 Save Run

```
Description of All the tables:  
desc manager;  
desc caretaker;  
desc elderly;  
desc medical;  
desc gate_pass;  
desc visitor;  
desc recreation;
```

Results Explain Describe Saved SQL History

Object Type TABLE Object GATE_PASS

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
GATE_PASS	PASS_ID	Number	-	10	0	1	-	-	-
	P_NAME	Varchar2	30	-	-	-	✓	-	-

1 - 2

Language: en-us Application Express 2.1.0.0.39
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SQL Commands

User: SCOTT

Home > SQL > SQL Commands

Autocommit Display 20 Save Run

```
Description of All the tables:  
desc manager;  
desc caretaker;  
desc elderly;  
desc medical;  
desc gate_pass;  
desc visitor;  
desc recreation;
```

Results Explain Describe Saved SQL History

Object Type TABLE Object VISITOR

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
VISITOR	V_ID	Number	-	10	0	-	✓	-	-
	V_NAME	Varchar2	30	-	-	-	✓	-	-
	VPHONE_NUMBER	Number	-	10	0	-	✓	-	-
	V_EMAIL	Varchar2	30	-	-	-	✓	-	-

1 - 4

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SQL Commands

User: SCOTT

Home > SQL > SQL Commands

Autocommit

```
Description of All the tables:
desc manager;
desc caretaker;
desc elderly;
desc medical;
desc gate_pass;
desc visitor;
desc recreation;
```

Results Explain Describe Saved SQL History

Object Type TABLE Object RECREATION

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
RECREATION	GAME_ZONE	Varchar2	30	-	-	-	✓	-	-
	SOCIAL_ACT	Varchar2	30	-	-	-	✓	-	-

Language: en-us

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25°C Haze

Equi-Joins

SQL Commands

Home > SQL > SQL Commands

Autocommit

```
Question of EQUI-JOINS
1. Display all the caretaker who works in Manager section A4.

select * from caretaker c, manager m
where c.section=m.section;
```

Results Explain Describe Saved SQL History

C_NAME	C_ID	C_PHONENUMBER	C_AREA	C_DISTRICT	SECTION	M_NAME	M_ID	SECTION
Md Islam	1111	1791	Mirpur	Dhaka	A1	TALHA	101	A1
Tania Akter	1112	1792	Mirpur1	Dhaka	A4	EMA	104	A4
Nipa Islam	1113	1793	Mirpur2	Dhaka	A1	TALHA	101	A1
Ismail Hasan	1114	1794	Mirpur3	Dhaka	A4	EMA	104	A4

4 rows returned in 0.00 seconds [CSV Export](#)

Language: en-us

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24°C Haze

Outer-Joins

SQL Commands

Home > SQL > SQL Commands

Autocommit Display 20 Save Run

```
Question of OUTER-JOINS
1. Get all the matching & non-matching records from both tables.
select * from caretaker c, manager m
where c.section(+) = m.section;
```

Results Explain Describe Saved SQL History

C_NAME	C_ID	C_PHONENUMBER	C_AREA	C_DISTRICT	SECTION	M_NAME	M_ID	SECTION
Md Islam	1111	1791	Mirpur	Dhaka	A1	TALHA	101	A1
Tania Akter	1112	1792	Mirpur1	Dhaka	A4	EMA	104	A4
Nipa Islam	1113	1793	Mirpur2	Dhaka	A1	TALHA	101	A1
Ismail Hasan	1114	1794	Mirpur3	Dhaka	A4	EMA	104	A4
-	-	-	-	-	-	WASHIK	103	A3
-	-	-	-	-	-	HASIB	102	A2

6 rows returned in 0.00 seconds [CSV Export](#)

Application Express 2.1.0.00.39
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Language: en-US 24°C Haze 12:36 AM 4/21/2022

Self-Joins

SQL Commands

Home > SQL > SQL Commands

Autocommit Display 20 Save Run

```
where c.section(+) = m.section;
```

Question of SELF-JOINS
1. Display all the managers who work in the same sections as A1.

```
select * from manager m, manager n
where m.section=n.M_Name AND (m.section='A1');
```

Results Explain Describe Saved SQL History

no data found

Application Express 2.1.0.00.39
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Language: en-US 24°C Haze 12:59 AM 4/21/2022

Constraints used:

Primary key

Not Null

Foreign Key

Unique

The screenshot shows the Oracle Application Express SQL Commands interface. The SQL code entered is:

```
alter table visitor add constraint pkk primary key(V_Id);
alter table visitor modify V_Id not null;
alter table caretaker add constraint fkk foreign key(Section) references manager(Section);
alter table visitor add constraint ukk unique(V_Id);

desc visitor;
```

Below the code, the results of the `desc visitor;` command are shown:

Table	Column	Data Type	Length	Precision	Scale	Primary Key	Nullable	Default	Comment
VISITOR	V_ID	Number	-	10	0	-	-	-	-
	V_NAME	Varchar2	30	-	-	-	✓	-	-
	VPHONE_NUMBER	Number	-	10	0	-	✓	-	-
	V_EMAIL	Varchar2	30	-	-	-	✓	-	-

At the bottom, it says "1 - 4". The status bar at the bottom right indicates "Application Express 2.1.0.00.39", "Copyright © 1999, 2006, Oracle. All rights reserved.", "Language: en-us", and the date "4/21/2022".

NB: Foreign key has been used as the final table of normalization suggest in that manner. The two screenshots given upwards are there to give a view of two other constraint being used, unique and not null

Questions & answer:

Question of EQUI-JOINS

1. Display all the caretaker who works in Manager section A4.

```
select * from caretaker c, manager m  
where c.section=m.section;
```

Question of OUTER-JOINS

1. Get all the matching & non-matching records from both tables.

```
select * from caretaker c, manager m  
where c.section(+) = m.section;
```

Question of SELF-JOINS

1. Display all the managers who work in the same sections as A1.

```
select * from manager m, manager n  
where m.section=n.M_Name AND (m.section='A1');
```

Sequence and View

```
create view carevu12
```

```
as select C_Id,C_Name  
from Caretaker  
where Section='A1';
```

Subquery

1. Show the Elderly name and id who lived Nikunja-2.

```
select E_name,E_Id,E_Area  
from elderly
```

```
where E_Area=(select E_Area from elderly where E_Id=2);
```

The screenshot shows the Oracle SQL Developer interface. The query editor window contains the following code:

```
Sub-Query  
Show the Elderly name and id who lived Nikunja-2.  
select E_name,E_Id,E_Area  
from elderly  
where E_Area=(select E_Area from elderly where E_Id=2);
```

The results window displays a single row of data:

E_NAME	E_ID	E_AREA
Mrs Asma	2	NIKUNJA 2

Below the results, it says "1 rows returned in 0.00 seconds". The bottom status bar indicates the application version is 2.1.0.0.39, the copyright year is 1999-2006, and the date is 4/21/2022.

Extras:

All the Queries for the project

```
create table manager( M_name varchar2(30), M_Id number(10) primary key not null, Section varchar2(30));
```

```
create table caretaker( C_Name varchar2(30), C_Id number(10) primary key not null, C_PhoneNumber number(30), C_Area varchar2(200), C_District varchar2(20),Section varchar2(30));
```

```
create table elderly(E_name varchar2(30),E_Id number(10)primary key not null,E_PhoneNumber number(30), E_Area varchar2(30),E_District varchar2(30));

create table medical( Doctors varchar2(30), Medicine_name varchar2(30),Medicine_type varchar2(30));

create table gate_pass( Pass_Id number(10) primary key not null, P_Name varchar2(30) );

create table visitor (V_id number(10),V_Name varchar2(30),VPhone_Number number(10),V_email varchar2(30));

create table recreation( Game_Zone varchar2(30), Social_act varchar2(30));
```

```
create table elderly_info(E_Id number(10)primary key not null, E_Area varchar2(200),E_district varchar2(30));

insert into manager values('TALHA',101,'A1');

insert into manager values('HASIB',102,'A2');

insert into manager values('WASHIK',103,'A3');

insert into manager values('EMA',104,'A4');

SELECT *

FROM manager;

insert into caretaker values('Md Islam',1111,01791,'Mirpur','Dhaka','A1');

insert into caretaker values('Tania Akter',1112,01792,'Mirpur1','Dhaka','A4');

insert into caretaker values('Nipa Islam',1113,01793,'Mirpur2','Dhaka','A1');

insert into caretaker values('Ismail Hasan',1114,01794,'Mirpur3','Dhaka','A4');

select *

from caretaker;

insert into elderly values('Md Ali',0001,0175588,'NIKUNJA 1','DHAKA');
```

```
insert into elderly values('Mrs Asma',0002,0175599,'NIKUNJA 2','DHAKA');  
insert into elderly values('Abdul Bari',0003,017588,'NIKUNJA 1','DHAKA');  
insert into elderly values('Younus Ali',0004,0175511,'NIKUNJ 2','DHAKA');
```

```
select *  
from elderly;  
  
insert into medical values('Dr Misra','NAPA','Type1');  
insert into medical values('Dr Muna','NAPA Extra','Type2');  
insert into medical values('Dr Yeasin','Biotin','Type3');  
insert into medical values('Dr Alom','Ativan','Type4');
```

```
select * from medical;  
  
insert into gate_pass values(01,'Rakib');  
insert into gate_pass values(02,'Karim');  
insert into gate_pass values(03,'Naim');  
insert into gate_pass values(04,'Razi');  
select * from gate_pass;
```

```
insert into visitor values(01,'Rakib',017,'rakib@gmail.com');  
insert into visitor values(02,'Karim',018,'karim@gmail.com');  
insert into visitor values(03,'Naim',014,'naim@gmail.com');  
insert into visitor values(04,'Razi',019,'razi@gmail.com');  
select * from visitor;  
insert into recreation values('Ludu',' Singing');
```

```
insert into recreation values('Uno','Movei watching');  
insert into recreation values('Chess','Acting');  
insert into recreation values('Table tennis','Danching');  
select * from recreation;
```

Description of All the tables:

desc manager;

desc caretaker;

desc elderly;

desc medical;

desc gate_pass;

desc visitor;

desc recreation;

Question of EQUI-JOINS

1. Display all the caretaker who works in Manager section A4.

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```

```
where c.section=m.section;
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Question of OUTER-JOINS

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Question of SELF-JOINS

1. Display all the managers who work in the same sections as A1.

```
select * from manager m, manager n
```

```
where m.section=n.M_Name AND (m.section='A1');
```

```
alter table visitor add constraint pkk primary key(V_Id);
alter table visitor modify V_Id not null;
alter table caretaker add constraint fkk foreign key(Section) references
manager(Section);
alter table visitor add constraint ukk unique(V_Id);
desc visitor;
```

```
create view carevu12
as select C_Id,C_Nam
from Caretaker
where Section='A1';
```

Sub-Query

Show the Elderly name and id who lived Nikunja-2.

```
select E_name,E_Id,E_Area
from elderly
where E_Area=(select E_Area from elderly where E_Id=2);
```

