

Al-Maaref University

Database Suspect

Nour Merhi

Database Lab

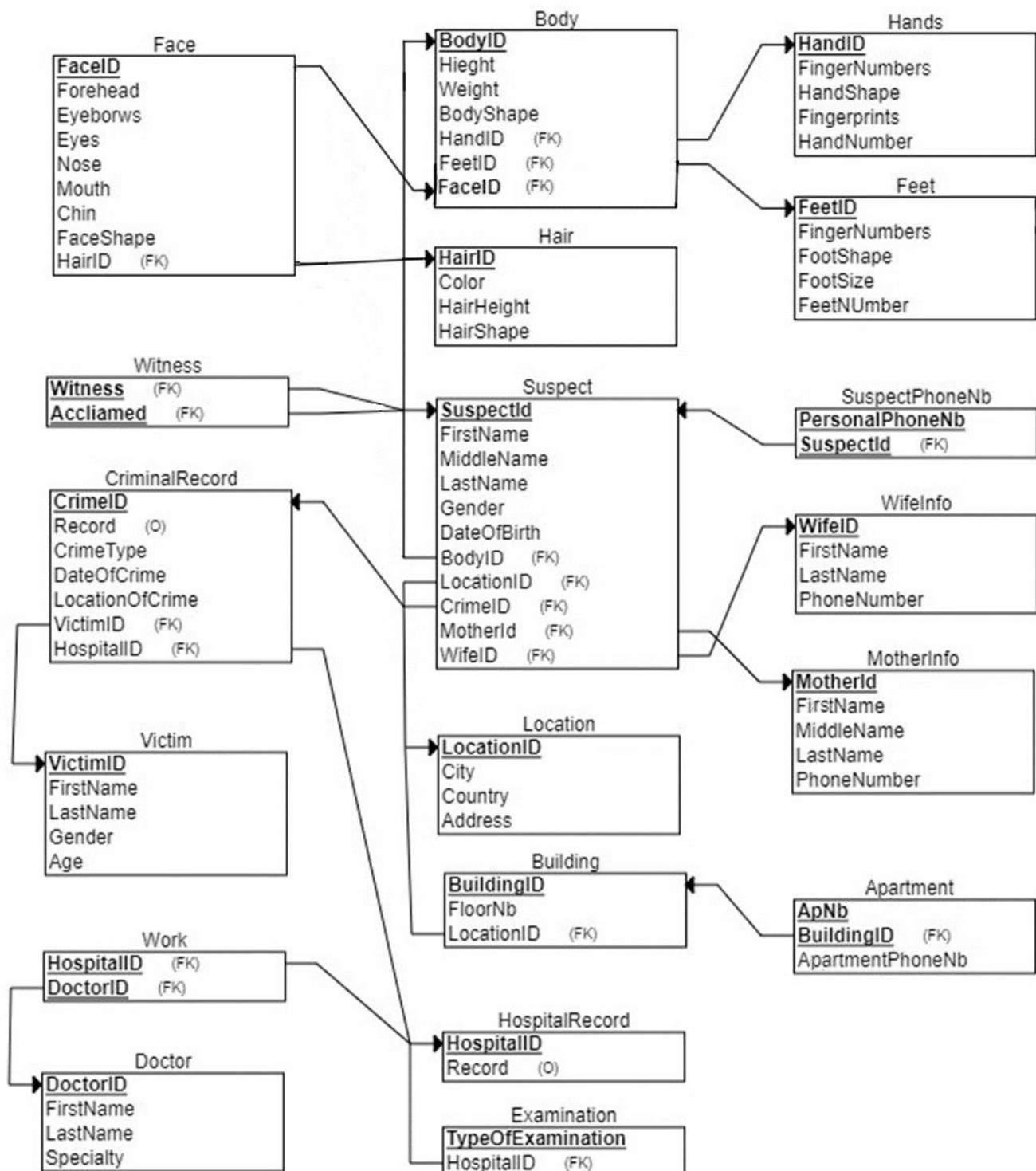
Dr. Wael Ayoub

Friday, January 5, 2024

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Relational Model:



Creating Database:

create database if not exists suspect;
use suspect;

```
create table Hair (  
hairID int primary key not null,  
Color varchar (15),  
HairHeight varchar (10),  
HairShape varchar (20)  
);
```

```
create table Face (  
faceID int primary key not null,  
forehead varchar (10) not null,  
eyebrows varchar (10) not null,  
eyeColor varchar (10) not null,  
nose varchar (10) not null,  
mouth varchar (10) not null,  
chin varchar (10) not null,  
faceShape varchar (20) not null,  
HairId int not null,  
foreign key (hairID) references Hair  
(hairID)  
);
```

```
create table Hands (  
handID int primary key not null,  
FingerNumbers int not null,  
HandShpae varchar (10) not null,  
FingerPrints varchar (3) not null,  
HandNumber int not null  
);
```

```
create table Feet (  
feetID int primary key not null,  
FingerNumbers int not null,  
FootShape varchar (10) not null,  
FootSize int not null,  
FeetNumber int not null  
);
```

```
create table Body (  
BodyID int primary key not null,  
Height decimal (3,2) not null,  
Weight decimal (3,3) not null,  
BodyShape varchar (20) not null,  
HandID int not null,
```

```
FeetID int not null,  
FaceID int not null,  
foreign key(handId) references Hands  
(HandID),  
foreign key (FeetId) references Feet  
(FeetID),  
foreign key (faceID) references Face  
(FaceID)  
);
```

```
create table Building (  
BuildingID int primary key not null,  
FloorNb int not null  
);
```

```
create table Apartment (  
ApartmentNb int not null,  
BuildingID int not null,  
ApartmentPhoneNb varchar (10) not null,  
primary key (ApartmentNb, BuildingID),  
foreign key (BuildingId) references building  
(BuildingID)  
);
```

```
create table Location (  
LocationId int primary key not null,  
City varchar (25) not null,  
Country varchar (25) not null,  
Address varchar (25) not null,  
BuildingID int not null,  
foreign key (buildingId) references Building  
(BuildingID)  
);
```

```
create table Doctor (  
DoctorId int primary key not null,  
FirstName varchar (25) not null,  
LastName varchar (25) not null,  
Specailty varchar (25) not null  
);  
Create table HospitalRecord (  
HospitalID int primary key not null,  
Record varchar (3)  
);
```

```

create table Working (
HospitalID int not null,
DoctorID int not null,
primary key (HospitalID, DoctorID),
foreign key (HospitalID) references
HospitalRecord (HospitalID),
foreign key (DoctorID) references Doctor
(DoctorID)
);
create table Examination (
hospitalID int not null,
TypeOfExamination varchar (25),
foreign key (hospitalID) references
hospitalRecord (HospitalID)
);

```

```

create table Victim (
VictimId int primary key not null,
FisrtName varchar (250) not null,
LastName varchar (20) not null,
Gender varchar (10) not null,
Age int not null
);
create table CriminalRecord (
CrimeID int primary key not null,
Record varchar (3),
CrimeType varchar (25),
DateOfCrime date,
LocationOfCrime varchar (25),
VictimID int not null,
HospitalId int not null,
foreign key (VictimID) references Victim
(VictimId),
foreign key (HospitalId) references
hospitalRecord (HospitalId)
);

```

```

create table MotherInfo (
MotherID int primary key not null,
FisrtName varchar (25) not null,
MiddleName varchar (25) not null,
LastName varchar (25) not null,
PhoneNumber varchar (8) not null
);
create table WifeInfo (
WifeID int primary key not null,

```

```

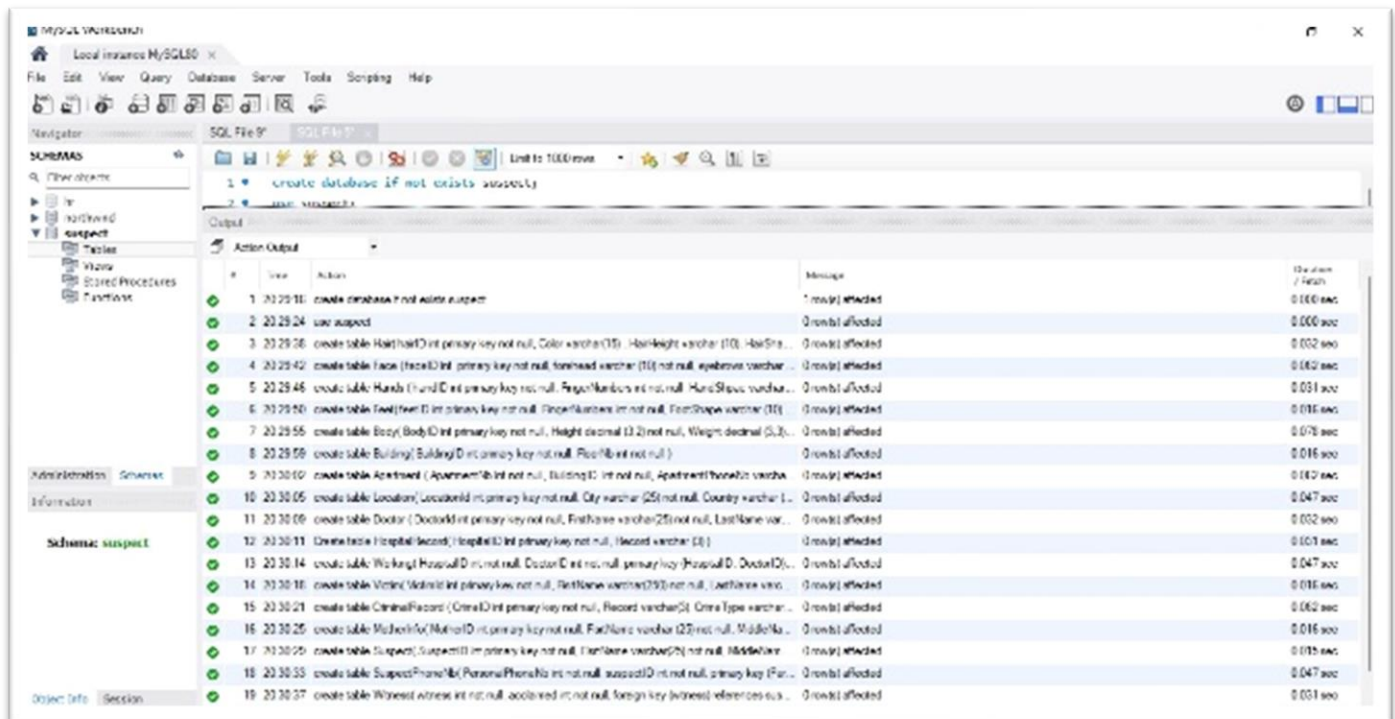
firstName varchar (25) not null,
LastName varchar (25) not null,
PhoneNumber varchar (8) not null
);

```

```

create table Suspect (
SuspectID int primary key not null,
FirstName varchar (25) not null,
MiddleName varchar (25) not null,
LastName varchar (25) not null,
Gender varchar (3) not null,
DateOfBirth date not null,
BodyID int not null,
LocationID int not null,
CrimeID int not null,
MotherID int not null,
WifeID int not null
);
create table SuspectPhoneNb (
PersonalPhoneNb int not null,
suspectID int not null,
primary key (PersonalPhoneNb, SuspectID),
foreign key (suspectId) references suspect
(suspectID)
);
create table Witness (
witness int not null,
acclaimed int not null,
foreign key (witness) references suspect
(suspectId),
foreign key (acclaimed) references suspect
(suspectId)
);

```



Inserting data to tables:

- Hair table:

insert into Hair values (1,"Brown", "Tall", "Straight");

insert into Hair values (2,"Brown", "Short", "Wavy");

insert into Hair values (3,"Black", "HalfCut", "Straight");

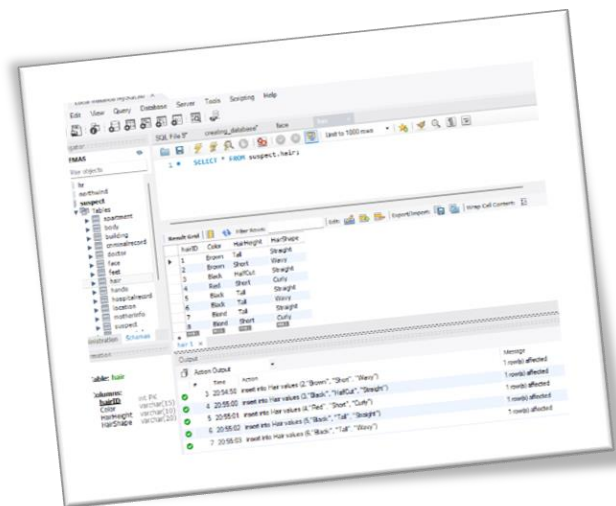
insert into Hair values (4,"Red", "Short", "Curly");

insert into Hair values (5,"Black", "Tall", "Straight");

insert into Hair values (6,"Black", "Tall", "Wavy");

insert into Hair values (7,"Blond", "Tall", "Straight");

insert into Hair values (8,"Blond", "Short", "Curly");



- Hands table:

insert into Hands values (1, 10, "Big", "Yes", 2);
 insert into Hands values (2, 10, "Normal", "Yes", 2);
 insert into Hands values (3, 9, "Normal", "No", 2);
 insert into Hands values (4, 10, "Small", "Yes", 2);
 insert into Hands values (5, 5, "Normal", "Yes", 1);
 insert into Hands values (6, 10, "Normal", "Yes", 2);
 insert into Hands values (7, 10, "Small", "Yes", 2);
 insert into Hands values (8, 7, "Small", "No", 2);
 insert into Hands values (9, 4, "Normal", "No", 1);

handID	FingerNumbers	HandType	FingerPrints	HandNumber
1	10	Big	Yes	2
2	10	Normal	Yes	2
3	9	Normal	No	2
4	10	Small	Yes	2
5	5	Normal	Yes	1
6	10	Normal	Yes	2
7	10	Small	Yes	2
8	7	Small	No	2
9	4	Normal	No	1

- Feet Table:

insert into feet values (1, 9, "Big", "43", 2);
 insert into feet values (2, 10, "Medium", "39", 2);
 insert into feet values (3, 10, "Big", "46", 2);
 insert into feet values (4, 10, "Small", "35", 2);
 insert into feet values (5, 5, "Medium", "41", 1);
 insert into feet values (6, 9, "Medium", "43", 2);
 insert into feet values (7, 8, "Big", "42", 2);
 insert into feet values (8, 10, "Medium", "40", 10);
 insert into feet values (9, 10, "Medium", "41", 10);

feetID	FingerNumbers	FootShape	FootSize	FeetNumber
1	9	Big	43	2
2	10	Medium	39	2
3	10	Big	46	2
4	10	Small	35	2
5	5	Medium	41	1
6	9	Medium	43	2
7	8	Big	42	2
8	10	Medium	40	10
9	10	Medium	41	10

- Face table:

insert into face values (1, "Broad", "Thick", "Brown", "Straight", "Small", "Long", "Circular", 1);
 insert into face values (2, "Broad", "Thick", "Brown", "Curved", "Normal", "long", "triangular", 2);
 insert into face values (3, "Broad", "Thick", "Green", "Straight", "Small", "Narrow", "Square", 1);
 insert into face values (4, "Curved", "Thin", "OliveGreen", "Convex", "Normal", "Narrow", "Square", 3);

faceID	forehead	eyebrows	nose	mouth	chin	faceShape	faceID
1	Broad	Thick	Brown	Straight	Small	Long	Circular
2	Broad	Thick	Brown	Curved	Normal	long	triangular
3	Broad	Thick	Green	Straight	Small	Narrow	Square
4	Curved	Thin	OliveGreen	Convex	Normal	Narrow	Square

insert into face values (5, "Sharp", "Thin", "HoneyBrown", "Lowered", "Normal", "Square", "Rectangular", 4);

insert into face values (6, "Narrow", "Triangular", "Black", "Straight", "Normal", "Narrow", "Circular", 4);

insert into face values (7, "M-Shaped", "Straight", "Blue", "Concave", "Normal", "Receding", "Circular", 7);

insert into face values (8, "M-Shaped", "Straight", "Grey", "Concave", "Small", "Receding", "Triangular", 8);

insert into face values (9, "Fuzy-Mount", "Triangular", "LightBlue", "Lowered", "Small", "Normal", "Triangular", 5);

- **Body table:**

alter table Body modify Weight decimal (5,2) not null;

insert into Body values (1, 1.60, 63.0, "Pear", 1, 3, 1);

insert into body values (2, 1.67, 73.4, "Apple", 1, 2, 3);

insert into body values (3, 1.68, 70.7, "Mascular", 3, 2, 5);

insert into body values (4, 1.50, 40.0, "Traingular", 5, 6, 9);

insert into body values (5, 1.56, 66.4, "Round", 7, 3, 9);

insert into body values (6, 1.88, 83.2, "Mascular", 6, 8, 2);

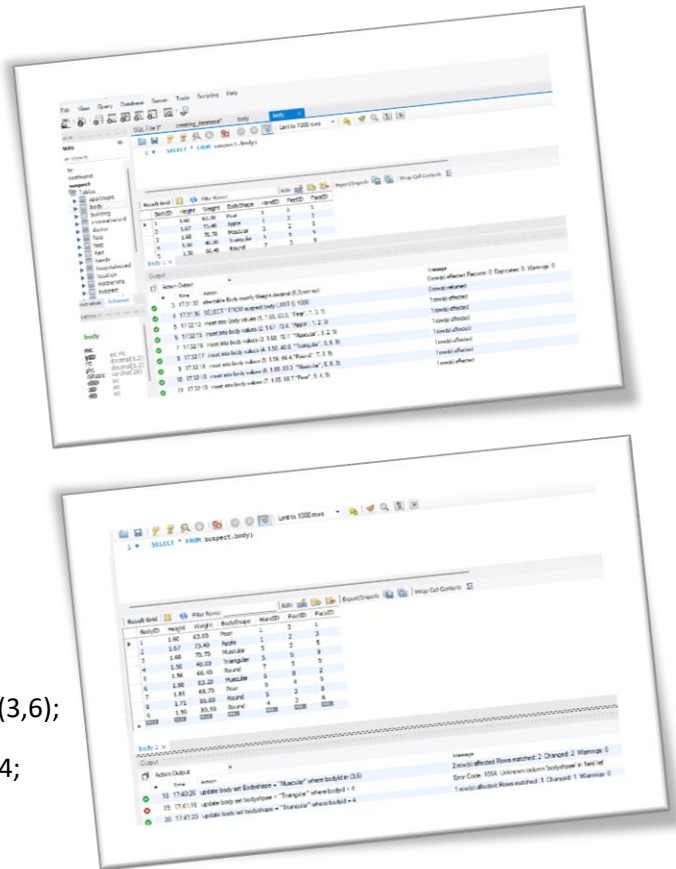
insert into body values (7, 1.85, 68.7, "Pear", 9, 4, 9);

insert into body values (8, 1.71, 86.8, "Round", 5, 3, 8);

insert into body values (9, 1.59, 80.5, "Round", 4, 2, 6);

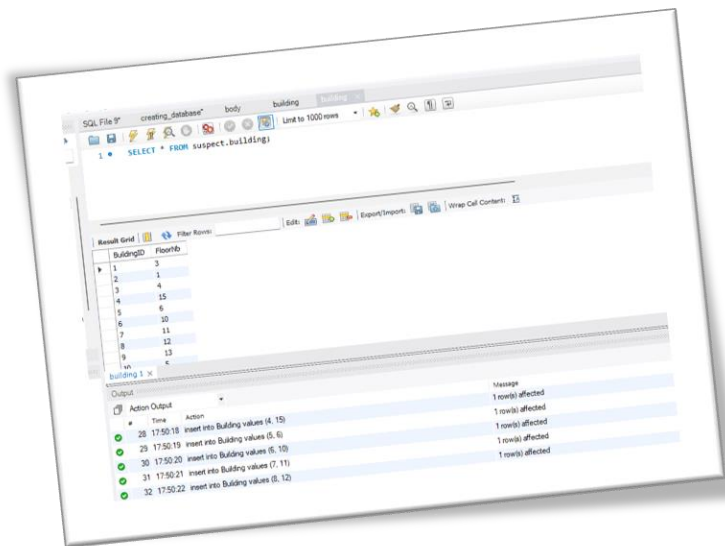
update body set Bodyshape = "Muscular" where bodyId in (3,6);

update body set Bodyshape = "Triangular" where bodyid = 4;



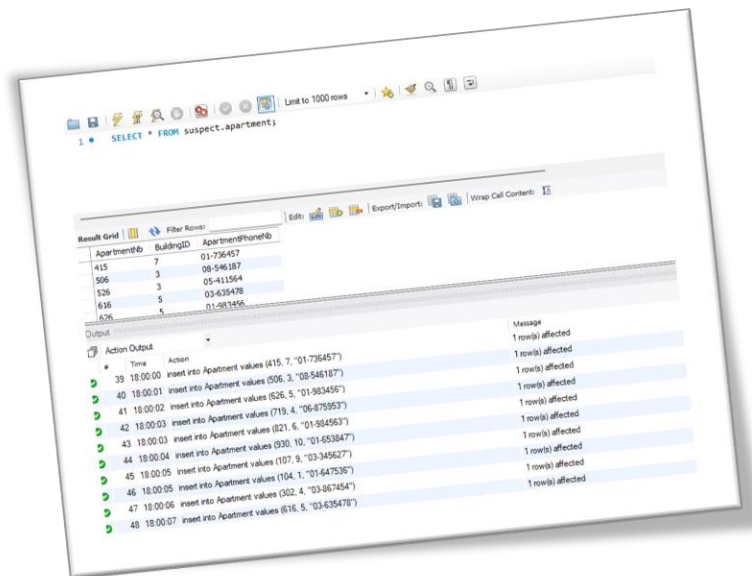
- Building

insert into Building values (1, 3);
 insert into Building values (2, 1);
 insert into Building values (3, 4);
 insert into Building values (4, 15);
 insert into Building values (5, 6);
 insert into Building values (6, 10);
 insert into Building values (7, 11);
 insert into Building values (8, 12);
 insert into Building values (9, 13);
 insert into Building values (10,5);



- Apartment

insert into Apartment values (101, 1, "01-875953");
 insert into Apartment values (205, 8, "03-875453");
 insert into Apartment values (310, 2, "05-235953");
 insert into Apartment values (415, 7, "01-736457");
 insert into Apartment values (506, 3, "08-546187");
 insert into Apartment values (626, 5, "01-983456");
 insert into Apartment values (719, 4, "06-875953");
 insert into Apartment values (821, 6, "01-984563");
 insert into Apartment values (930, 10, "01-653847");
 insert into Apartment values (107, 9, "03-345627");
 insert into Apartment values (104, 1, "01-647536");
 insert into Apartment values (302, 4, "03-867454");
 insert into Apartment values (616, 5, "03-635478");
 insert into Apartment values (526, 3, "05-411564");



- Location

insert into Location values (1, "Akkar", "Lebanon", "Jouma",2);

insert into Location values (2, "Baalbak", "Lebanon", "Wadi",4);

insert into Location values (3, "Beirut",
"Lebanon", "Ain El-Mreisse",6);

insert into Location values (4, "Beirut",
"Lebanon", "Snoubra",1);

insert into Location values (5, "Akkar",
"Lebanon", "Qaitea",1);

insert into Location values (6, "Beirut",
"Lebanon", "Hamra",6);

insert into Location values (7, "Nabatieh",
"Lebanon", "Raoucheh",7);

insert into Location values (8, "Beirut",
"Lebanon", "Ain El-Tine",5);

insert into Location values (9, "Beirut", "Lebanon", "Ras Beirut",10);

insert into Location values (10, "Baalbak", "Lebanon", "Brazil Street",3);

SQL File 9: creating_database apartment location Limit to 1000 rows

1 * SELECT * FROM suspect.location;

LocationID	City	Country	Address	BuildingID
1	Akkar	Lebanon	Jouma	2
2	Baalbak	Lebanon	Wadi	4
3	Beirut	Lebanon	Ain El-Mreisse	6
4	Beirut	Lebanon	Snoubra	1
5	Akkar	Lebanon	Qaitea	1
6	Beirut	Lebanon	Hamra	6
7	Nabatieh	Lebanon	Raoucheh	7
8	Beirut	Lebanon	Ain El-Tine	5
9	Beirut	Lebanon	Ras Beirut	10

Output 1 x

Action	Time	Message
55	18:17:15	insert into Location values (4, "Beirut", "Lebanon", "Snoubra",1); 1 row(s) affected
56	18:17:16	insert into Location values (5, "Akkar", "Lebanon", "Qaitea",1); 1 row(s) affected
57	18:17:16	insert into Location values (6, "Beirut", "Lebanon", "Hamra",6); 1 row(s) affected
58	18:17:17	insert into Location values (7, "Nabatieh", "Lebanon", "Raoucheh",7); 1 row(s) affected
59	18:17:17	insert into Location values (8, "Beirut", "Lebanon", "Ain El-Tine",5); 1 row(s) affected
60	18:17:19	insert into Location values (9, "Beirut", "Lebanon", "Ras Beirut",10);

- Doctor

insert into Doctor values (1, "Ali", "Mohammad", "Surgery");

insert into Doctor values (2, "Ahmad", "Asi",
"Psychiatry");

insert into Doctor values (3, "Joe", "Rida",
"Surgery");

insert into Doctor values (4, "Ali", "Hussein",
"Neurology");

insert into Doctor values (5, "Mortada",
"Mozanar", "Nursing");

insert into Doctor values (6, "Abbass",
"Mortada", "Cardiology");

insert into Doctor values (7, "Nour", "Jouni",
"Emergency");

insert into Doctor values (8, "Cristine", "Awela", "Dermatology");

SQL File 9: creating_database apartment location doctor Limit to 1000 rows

1 * SELECT * FROM suspect.doctors;

DoctorID	FirstName	LastName	Specialty
1	Ali	Mohammad	Surgery
2	Ahmad	Asi	Psychiatry
3	Joe	Rida	Surgery
4	Ali	Hussein	Neurology
5	Mortada	Mozanar	Nursing
6	Abbass	Mortada	Cardiology
7	Nour	Jouni	Emergency
8	Cristine	Awela	Dermatology

Output 1 x

Action	Time	Message
65	18:28:07	insert into Doctor values (2, "Ahmad", "Asi", "Psychiatry"); 1 row(s) affected
66	18:28:08	insert into Doctor values (3, "Joe", "Rida", "Surgery"); 1 row(s) affected
67	18:28:09	insert into Doctor values (4, "Ali", "Hussein", "Neurology"); 1 row(s) affected
68	18:28:10	insert into Doctor values (5, "Mortada", "Mozanar", "Nursing"); 1 row(s) affected
69	18:28:11	insert into Doctor values (6, "Abbass", "Mortada", "Cardiology"); 1 row(s) affected
70	18:28:11	insert into Doctor values (7, "Nour", "Jouni", "Emergency");

insert into Doctor values (9, "Fatima", "Ahmad", "Surgery");

insert into Doctor values (10, "Rami", "Sherbel", "Cardiology");

- Hospital Record:

insert into hospitalrecord values (1, "Yes");

insert into hospitalrecord values (2, "No");

insert into hospitalrecord values (3, "Yes");

insert into hospitalrecord values (4, "No");

insert into hospitalrecord values (5, "No");

insert into hospitalrecord values (6, "No");

insert into hospitalrecord values (7, "Yes");

insert into hospitalrecord values (8, "Yes");

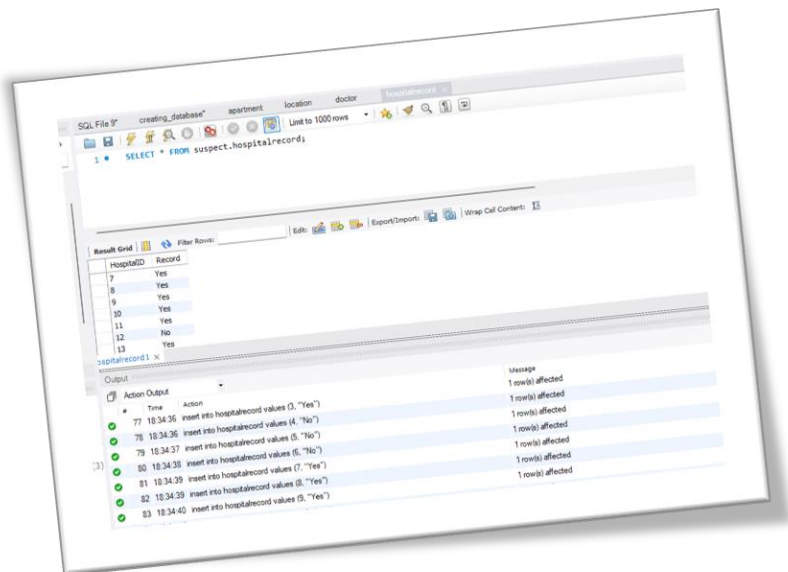
insert into hospitalrecord values (9, "Yes");

insert into hospitalrecord values (10, "Yes");

insert into hospitalrecord values (11, "Yes");

insert into hospitalrecord values (12, "No");

insert into hospitalrecord values (13, "Yes");



- Examination:

insert into Examination values (1, "Hand Surgery");

insert into Examination values (3, "Brain Surgery");

insert into Examination values (7, "Heart Attack");

insert into Examination values (8, "Hand Movement");

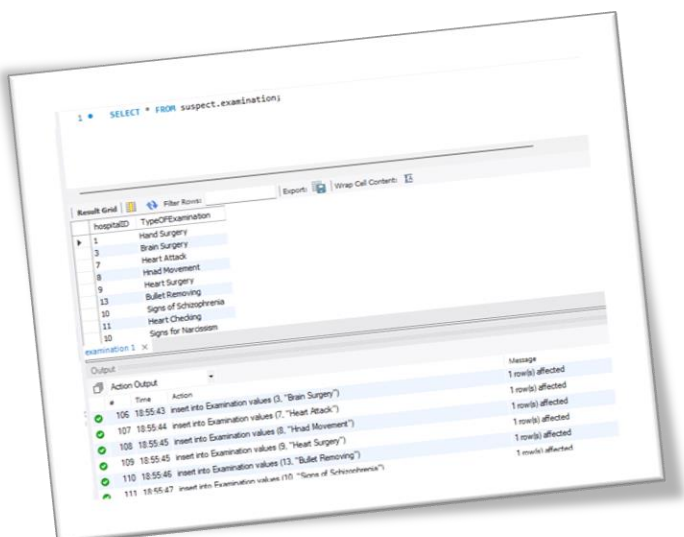
insert into Examination values (9, "Heart Surgery");

insert into Examination values (13, "Bullet Removing");

insert into Examination values (10, "Signs of Schizophrenia");

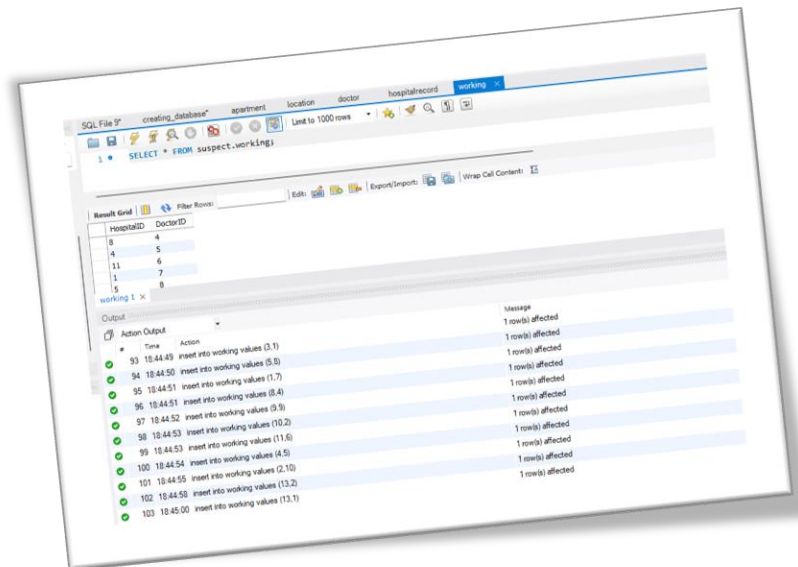
insert into Examination values (11, "Heart Checking");

insert into Examination values (10, "Signs for Narcissism");



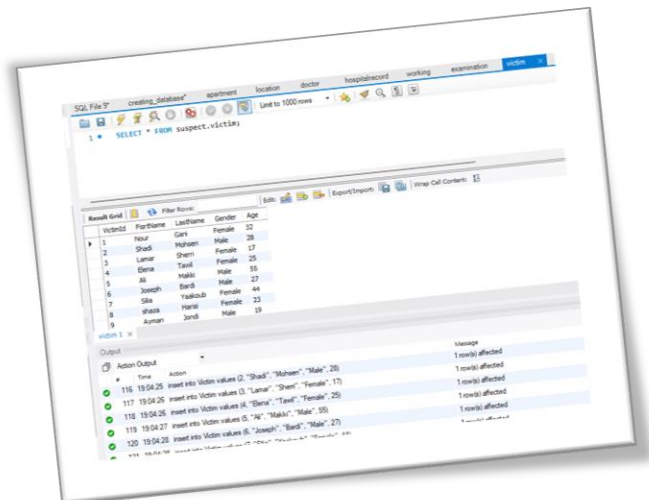
- Working

insert into working values (1,1);
 insert into working values (3,1);
 insert into working values (5,8);
 insert into working values (1,7);
 insert into working values (8,4);
 insert into working values (9,9);
 insert into working values (10,2);
 insert into working values (11,6);
 insert into working values (4,5);
 insert into working values (2,10);
 insert into working values (13,2);
 insert into working values (13,1);



- Victim:

insert into Victim values (1, "Nour", "Gani", "Female", 32);
 insert into Victim values (2, "Shadi", "Mohsen", "Male", 28);
 insert into Victim values (3, "Lamar", "Sherri", "Female", 17);
 insert into Victim values (4, "Elena", "Tawil", "Female", 25);
 insert into Victim values (5, "Ali", "Makki", "Male", 55);
 insert into Victim values (6, "Joseph", "Bardi", "Male", 27);
 insert into Victim values (7, "Silia", "Yaakoub", "Female", 44);
 insert into Victim values (8, "Shaza", "Harisi", "Female", 23);
 insert into Victim values (9, "Ayman", "Jondi", "Male", 19);



- Criminal Record:

Alter table CriminalRecord Modify VictimId int;
 insert into CriminalRecord values (1, "Yes", "Killed Teenager", "2015-01-11", "Beirut", 3, 2);
 insert into CriminalRecord values (2, "Yes", "Killed Adult", "2009-05-23", "Beirut", 5, 10);

insert into CriminalRecord values (3, "Yes", "Drug Dealing", "2006-10-15", "Sour", null, 13);

insert into CriminalRecord values (4, "No", null, null, null, null, 12);

insert into CriminalRecord values (5, "No", null,
null, null, null, 4);

insert into CriminalRecord values (6, "Yes", "Drug
Dealing", "2019-03-23", "Syda", 9, 10);

insert into CriminalRecord values (7, "No", null,
null, null, null, 2);

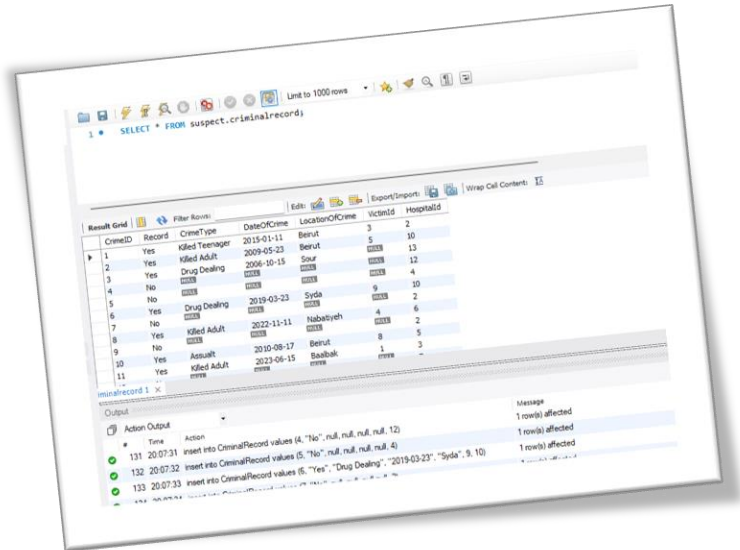
insert into CriminalRecord values (8, "Yes", "Killed
Adult", "2022-11-11", "Nabatiyeh", 4, 6);

insert into CriminalRecord values (9, "No", null,
null, null, null, 2);

insert into CriminalRecord values (10, "Yes",
"Assault", "2010-08-17", "Beirut", 8, 5);

insert into CriminalRecord values (11, "Yes", "Killed Adult", "2023-06-15", "Baalbak", 1, 3);

insert into CriminalRecord values (12, "No", null, null, null, null, 7);



CriminalID	Record	CrimeType	DateOfCrime	LocationOfCrime	VictimID	HospitalID
1	Yes	Killed Teenager	2019-01-11	Beirut	5	2
2	Yes	Killed Adult	2009-05-23	Beirut	13	13
3	Yes	Drug Dealing	2006-10-15	Sour	12	12
4	No				4	4
5	No				9	10
6	Yes	Drug Dealing	2019-03-23	Syda	9	10
7	No				2	2
8	Yes	Killed Adult	2022-11-11	Nabatiyeh	4	6
9	No				2	2
10	Yes	Assault	2010-08-17	Beirut	8	5
11	Yes	Killed Adult	2023-06-15	Baalbak	1	3

Output

#	Time	Action	Message
131	20:07:31	insert into CriminalRecord values (4, "No", null, null, null, null, 12)	1 row(s) affected
132	20:07:32	insert into CriminalRecord values (5, "No", null, null, null, null, 4)	1 row(s) affected
133	20:07:33	insert into CriminalRecord values (6, "Yes", "Drug Dealing", "2019-03-23", "Syda", 9, 10)	1 row(s) affected

- **Mother Info:**

alter table MotherInfo modify phoneNumber varchar (10) not null;

insert into MotherInfo values (1, "Maha", "Ismail",
"Mohammad", "76-123765");

insert into MotherInfo values (2, "Mariam", "Noah",
"Alaweyeh ", "76-763544");

insert into MotherInfo values (3, "Aliyeh", "Liam",
"Nour ElDine", "81-983546");

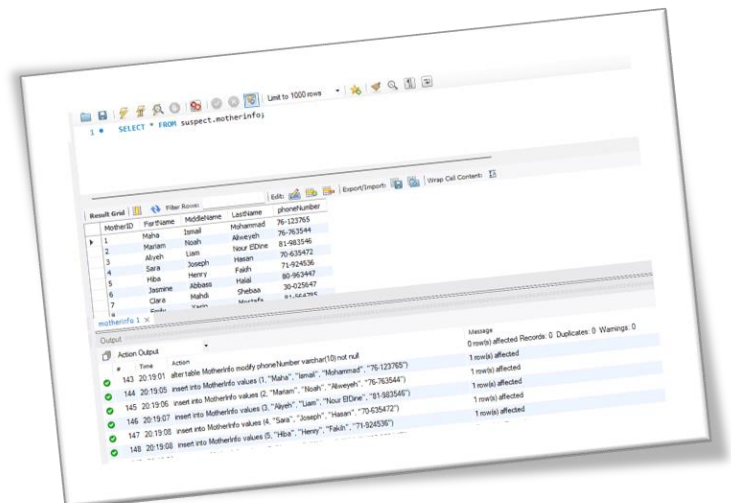
insert into MotherInfo values (4, "Sara", "Joseph",
"Hasan", "70-635472");

insert into MotherInfo values (5, "Hiba", "Henry",
"Fakih", "71-924536");

insert into MotherInfo values (6, "Jasmine",
"Abbass", "Halal", "80-963447");

insert into MotherInfo values (7, "Clara", "Mahdi", "Shebaa", "30-025647");

insert into MotherInfo values (8, "Emily", "Yasin", "Mostafa", "81-564785");



MotherID	FirstName	MiddleName	LastName	phoneNumber
1	Maha	Ismail	Mohammad	76-123765
2	Mariam	Noah	Alaweyeh	76-763544
3	Aliyeh	Liam	Nour ElDine	81-983546
4	Sara	Joseph	Hasan	70-635472
5	Hiba	Henry	Fakih	71-924536
6	Jasmine	Abbass	Halal	80-963447
7	Clara	Mahdi	Shebaa	30-025647
8	Emily	Yasin	Mostafa	81-564785

Output

#	Time	Action	Message
143	20:19:01	alter table MotherInfo modify phoneNumber varchar(10) not null	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0
144	20:19:05	insert into MotherInfo values (1, "Maha", "Ismail", "Mohammad", "76-123765")	1 row(s) affected
145	20:19:06	insert into MotherInfo values (2, "Mariam", "Noah", "Alaweyeh", "76-763544")	1 row(s) affected
146	20:19:07	insert into MotherInfo values (3, "Aliyeh", "Liam", "Nour ElDine", "81-983546")	1 row(s) affected
147	20:19:08	insert into MotherInfo values (4, "Sara", "Joseph", "Hasan", "70-635472")	1 row(s) affected
148	20:19:08	insert into MotherInfo values (5, "Hiba", "Henry", "Fakih", "71-924536")	1 row(s) affected

- **Wife Info:**

alter table wifeinfo modify phoneNumber varchar (10)
not null;

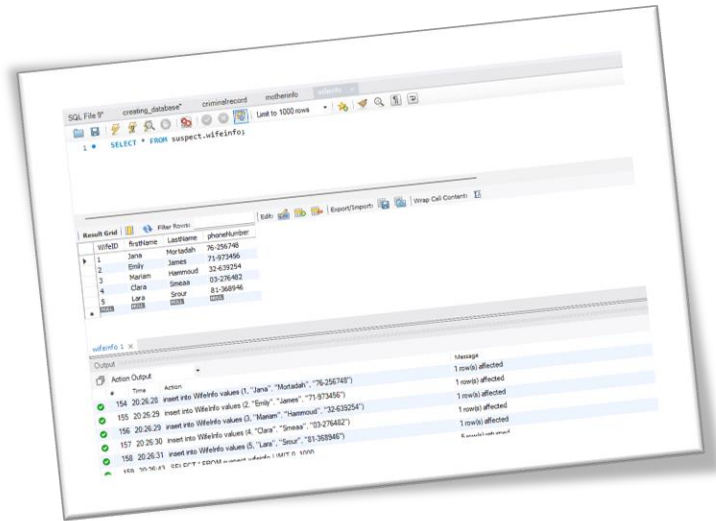
insert into WifeInfo values (1, "Jana", "Mortadah", "76-256748");

insert into WifeInfo values (2, "Emily", "James", "71-973456");

insert into WifeInfo values (3, "Mariam", "Hammoud", "32-639254");

insert into WifeInfo values (4, "Clara", "Smeaa", "03-276482");

insert into WifeInfo values (5, "Lara", "Srour", "81-368946");



- **Suspect:**

alter table suspect modify MotherId int;

alter table suspect modify wifeid int;

alter table suspect modify gender varchar (10) not null;

insert into Suspect values (1, "Anas", "Mahdi", "Ballout", "Male", "2001-01-03", 3, 10, 1, null, null);

insert into Suspect values (2, "Amir", "Mostafa", "Baidar", "Male", "1998-06-25", 5, 9, 7, 8, 5);

insert into Suspect values (3, "Elie", "Saleh", "Marjeh", "Male", "1964-12-12", 6, 3, 3, 3, 1);

insert into Suspect values (4, "Liza", "Leonardo", "Tawil", "Female", "1996-03-01", 9, 2, 6, 7, null);

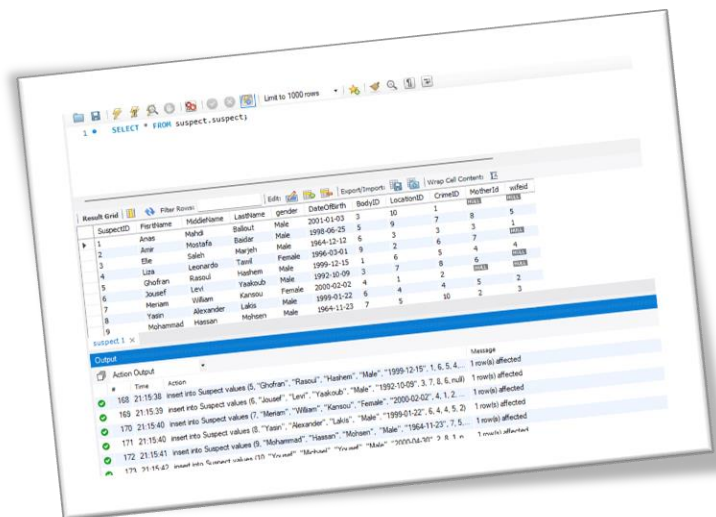
insert into Suspect values (5, "Ghofran", "Rasoul", "Hashem", "Male", "1999-12-15", 1, 6, 5, 4, 4);

insert into Suspect values (6, "Jousef", "Levi", "Yaakoub", "Male", "1992-10-09", 3, 7, 8, 6, null);

insert into Suspect values (7, "Meriam", "William", "Kansou", "Female", "2000-02-02", 4, 1, 2, null, null);

insert into Suspect values (8, "Yasin", "Alexander", "Lakis", "Male", "1999-01-22", 6, 4, 4, 5, 2);

insert into Suspect values (9, "Mohammad", "Hassan", "Mohsen", "Male", "1964-11-23", 7, 5, 10, 2, 3);



insert into Suspect values (10, "Yousef", "Michael", "Yousef", "Male", "2000-04-30", 2, 8, 1, null, null);

insert into Suspect values (11, "Gamila", "Mostfah", "Baidar", "Female", "1960-05-07", 8, 8, 12, 8, null);

insert into Suspect values (12, "Tony", "Issa", "Khalil", "Male", "1999-03-12", 2, 7, 11, null, null);

- **Suspect Phone Number:**

alter table suspectPhonenb modify personalPhoneNb varchar (10) not null;

insert into SuspectPhoneNb values ("76-984567", 2);

insert into SuspectPhoneNb values ("76-875345", 1);

insert into SuspectPhoneNb values ("81-287425", 2);

insert into SuspectPhoneNb values ("03-532297", 4);

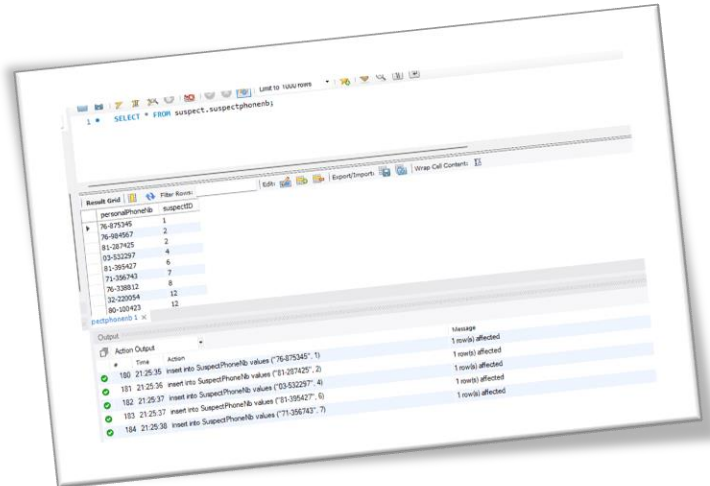
insert into SuspectPhoneNb values ("81-395427", 6);

insert into SuspectPhoneNb values ("71-356743", 7);

insert into SuspectPhoneNb values ("76-338812", 8);

insert into SuspectPhoneNb values ("32-220054", 12);

insert into SuspectPhoneNb values ("80-100423", 12);



- **Witness:**

insert into Witness values (1, 12);

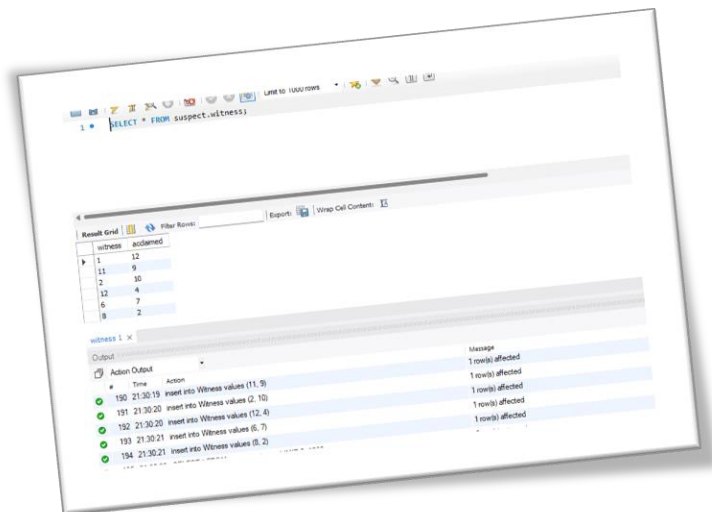
insert into Witness values (11, 9);

insert into Witness values (2, 10);

insert into Witness values (12, 4);

insert into Witness values (6, 7);

insert into Witness values (8, 2);



Queries Done on this Project:

a) 10 Select, Insert, Update, and Delete queries.

1. select * from suspect limit 5;
selects first 5 suspects.

SQL Studio interface showing the 'suspect' table query results. The query is 'select * from suspect limit 5;'. The results grid shows 5 rows of suspect data.

SuspectID	FirstName	MiddleName	LastName	gender	DateOfBirth	BodyID	LocationID	CrimeID	WitnessID	valued
1	Amr	Mahdi	Bakout	Male	2001-01-03	3	10	1	1000	1000
2	Amr	Mostafa	Bakdar	Male	1998-06-25	5	9	7	8	5
3	Elie	Saleh	Marjeh	Male	1984-12-12	6	3	3	3	1
4	Liza	Leonardo	Tamir	Female	1995-03-01	9	2	6	7	1000
5	Chufan	Rasoul	Hashem	Male	1999-12-15	1	6	5	4	4

Output window showing the execution of the query:

#	Time	Action	Message
191	21:30:20	insert into Witness values (2, 10)	1 row(s) affected
192	21:30:20	insert into Witness values (12, 4)	1 row(s) affected
193	21:30:21	insert into Witness values (6, 7)	1 row(s) affected
194	21:30:21	insert into Witness values (8, 2)	1 row(s) affected
195	21:30:29	SELECT * FROM suspect witness LIMIT 0, 1000	6 row(s) returned
196	21:45:49	select * from suspect limit 5	5 row(s) returned

2. select FirstName, LastName from suspect order by firstName;
selects name of the suspect in descending order.

SQL Studio interface showing the 'suspect' table query results. The query is 'select * from suspect limit 5;'. The results grid shows 5 rows of suspect data.

FirstName	LastName
Amr	Bakdar
Amr	Bakout
Elie	Marjeh
Chufan	Hashem
Liza	Tamir

Output window showing the execution of the query:

#	Time	Action	Message
199	21:53:50	select FirstName, LastName from suspect order by firstName LIMIT 0, 1000	1 row(s) returned
200	21:54:16	select FirstName, LastName from suspect order by firstName LIMIT 0, 1000	1 row(s) returned
201	21:56:40	insert into Witness values (1,10)	1 row(s) affected

3. insert into Witness values (1,10);
insert new value into witness table

SQL Studio interface showing the 'witness' table query results. The query is 'select * from witness limit 5;'. The results grid shows 5 rows of witness data.

witness	acclaimed
1	12
11	9
2	10
12	4
6	7
8	2
1	10

Output window showing the execution of the query:

#	Time	Action	Message
199	21:53:50	select FirstName, LastName from suspect order by firstName LIMIT 0, 1000	1 row(s) returned
200	21:54:16	select FirstName, LastName from suspect order by firstName LIMIT 0, 1000	1 row(s) returned
201	21:56:40	insert into Witness values (1,10)	1 row(s) affected

4. delete from witness where witness = 1;
delete row having witness id equals to 1

SQL Studio interface showing the 'witness' table query results. The query is 'delete from witness where witness = 1;'. The results grid shows 5 rows of witness data.

witness	acclaimed
11	9
2	10
12	4
6	7
8	2

Output window showing the execution of the query:

#	Time	Action	Message
203	21:58:15	delete from witness where witness = 1	1 row(s) affected
204	21:58:21	SELECT * FROM suspect witness LIMIT 0, 1000	6 row(s) returned

5. select * from motherinfo order by firstName desc;
select all info of the mother ordered by firstName.

SQL Studio interface showing the 'motherinfo' table query results. The query is 'select * from motherinfo order by firstName desc;'. The results grid shows 8 rows of mother information.

MotherID	FirstName	MiddleName	LastName	phoneNumber
4	Sara	Joseph	Hasan	70-635472
2	Mariam	Noah	Aliveyeh	76-763544
1	Maha	Ismail	Mohammed	76-123765
6	Jasmine	Abbas	Hala	80-963447
5	Hiba	Henry	Fakh	71-924536
8	Emily	Yasin	Mostafa	81-564785
7	Clara	Mahdi	Shebaa	30-025647
3	Aliyeh	Liam	Nour ElDine	81-983546

Output window showing the execution of the query:

#	Time	Action	Message
207	22:11:18	alter table motherinfo change FirstName FirstName varchar (25) not null	0 row(s) affected
208	22:11:36	select * from motherinfo order by firstName desc LIMIT 0, 1000	8 row(s) returned

6. select * from wifeinfo where firstName like '%a%';
select all wife info whose first name contain an s in it.

WifeID	firstName	LastName	phoneNumber
1	Jana	Mortadah	76-256748
3	Mariam	Hammoud	32-639254
4	Clara	Smeaa	03-276482
5	Lara	Srou	81-368946

wifeinfo 5 x

Output

Action Output

#	Time	Action
209	22:13:06	select * from wifeinfo where firstName like "%a%" LIMIT 0, 1000
210	22:13:17	select * from wifeinfo where firstName like "%a%" LIMIT 0, 1000

7. select City, country from location where city = "Beirut";
Retrieves cities equal to Beirut and their country.

City	country
Beirut	Lebanon
Beirut	Lebanon
Beirut	Lebanon
Beirut	Lebanon
Beirut	Lebanon
Beirut	Lebanon

location 6 x

Output

Action Output

#	Time	Action
210	22:13:17	select * from wifeinfo where firstName like "%a%" LIMIT 0, 1000
211	22:14:51	select City, country from location where city = "Beirut" LIMIT 0, 1000

8. select * from hands where fingerprints = "yes";
selects hands who have fingerprints inserted to the table.

handID	FingerNumbers	HandShape	FingerPrints	HandNumber
1	10	Big	Yes	2
2	10	Normal	Yes	2
4	10	Small	Yes	2
5	5	Normal	Yes	1
6	10	Normal	Yes	2
7	10	Small	Yes	2

hands 7 x

Output

Action Output

#	Time	Action
212	22:16:57	select * from feet where fingerprints = "yes" LIMIT 0, 1000
213	22:17:18	select * from hands where fingerprints = "yes" LIMIT 0, 1000

9. select * from face where eyecolor = "Blue" and faceshape = "circular";
selects all info about a face who have blue eyes and circular face shape.

faceID	forehead	eyebrows	eyeColor	nose	mouth	chin	faceShape	HairId
7	M-Shaped	Straight	Blue	Concave	Normal	Receding	Circular	7

face 8 x

Output

Action Output

#	Time	Action
213	22:17:18	select * from hands where fingerprints = "yes" LIMIT 0, 1000
214	22:18:12	select * from face where eyecolor = "Blue" and faceshape = "circular" LIMIT 0, 1000

10. update witness set witness = 9 where acclaimed = 2;

select * from witness;

updates witness to be 9 whose acclaimed is 2.

witness	acclaimed
11	9
2	10
12	4
6	7
9	2

witness 9 x

Output

Action Output

#	Time	Action
217	22:29:06	update witness set witness = 9 where acclaimed = 2
218	22:29:28	select * from witness LIMIT 0, 1000

b) 5 sub-queries.

11. Select FirstName, lastName from doctor where doctorId = (select HospitalID from working where hospitalId = 3);
Selects the first name and last name of the Doctor who works in the hospital having id equals to 3.

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

FirstName	lastName
Joe	Rida

12. Select * from suspectPhoneNb where suspectId = (select suspectID from suspect where Wifeld = (select wifeld from wifeInfo where FirstName = "Emily" and LastName = "James"));
selects all suspect's phone numbers whose wife is named Emily James.

Result Grid

Filter Rows:

Edit: Export/Import: Wrap Cell

personalPhoneNb	suspectID
76-338812	8

suspectPhoneNb 11 x

Output

Action Output

#	Time	Action
1	22:39:45	Select FirstName, lastName from doctor where doctorId = (select HospitalID from working where ...
2	22:42:21	Select * from suspectPhoneNb where suspectId = (select suspectID from suspect where Wifeld ...

13. select firstName, middleName, lastName from suspect where locationId in (select locationId from location where City = "Nabatieh");
selects full name of the suspects who lives in the city Nabatiyeh.

Result Grid

Filter Rows:

Export

Wrap Cell Content:

	firstName	middleName	lastName
▶	Jousef	Levi	Yaakoub
	Tony	Issa	Khalli

suspect 12

x

Output

Action Output

#

Time

Action

✓	2	22:42:21	Select * from suspectPhoneNb where suspectId = (select suspectID from suspect where Wifed...
✓	3	22:44:14	select firstName, middleName, lastName from suspect where locationId in (select locationId fr...

14. select firstname, lastname from wifeinfo where wifeid = (select wifeid from suspect where suspectid = 5);
selects full name of the wife who's married to suspect having id 5.

Result Grid		
Filter Rows:	Export:	Wrap Cell Contents
firstname	lastname	
Clara	Smeaa	

wifefno 16 x		
Output		
Action Output		
#	Time	Action
8	22:47:04	select firstname, lastname from wifefno where wifef = (select wifefid from suspect where susp...
9	22:47:39	select firstname, lastname from wifefno where wifef = (select wifefid from suspect where susp...

15. select firstname, lastname, Specailty from doctor where doctorid in (select DoctorId from working where hospitalId = (select hospitalId from hospitalRecord where hospitalid = 3));
selects the full name and specialty od the doctor who works the hospital having id 3;

Result Grid		
Filter Rows:	Export:	Wrap Cell Contents
firstname	lastname	Specailty
Ali	Mohammad	Surgery

doctor 19 x		
Output		
Action Output		
#	Time	Action
12	22:50:22	select * from doctor where doctorid in (select DoctorId from working where hospitalId = (sele...
13	22:50:36	select firstname, lastname, Specailty from doctor where doctorid in (select DoctorId from worki...

c) 5 Join queries.

16. Select v.firsrName, v.lastName from victim as v
inner join criminalRecord as c on v.victimID = c.victimID
inner join suspect as s on s.crimeID = c.CrimeID where s.FirstName = "Liza" and s.lastName = "Tawil";
selects victims' full name who has been killed by Liza Tawil.

Result Grid		
Filter Rows:	Export:	Wrap Cell Contents
fristName	lastName	
Ayman	Jondi	

Result 20 x		
Output		
Action Output		
#	Time	Action
14	23:00:56	Select v.firsrName, v.lastName from victim as v inner join criminalRecord as c on v.victimID = ...
15	23:01:29	Select v.firsrName, v.lastName from victim as v inner join criminalRecord as c on v.victimID = ...

17. Select s.firstName, s.LastName from suspect as s
inner join body as b on b.bodyid = s.bodyid
inner join face as f on f.FaceID = b.FaceID where f.eyeColor = "Green" or f.faceShape = "Rectangular" or f.mouth = "small";
selects suspect's first name and last name whose eyes are green, face shape rectangular and mouth small.

Result Grid		Filter Rows:	Export:	Wrap Cell Contents:
firstName	lastName			
Anas	Balout			
Amir	Baidar			
Ghofran	Hashem			
Jousef	Yaakoub			
Marjan	Karrou			
Mohammad	Mohsen			
Yousef	Yousef			
Gamila	Baidar			
Tony	Khalil			

Result 21	
Output	
Action Output	
#	Time
16	23:05:16
17	23:06:00

18. Select firstName, middleName, lastName, c.dateOfCrime from suspect as s
inner join criminalRecord as c on c.crimelD = s.CrimelD where c.dateOfCrime = "2022-11-11";
selects suspect's full name who made a crime in 2022-11-11.

Result Grid		Filter Rows:	Export:	Wrap Cell Contents:
firstName	middleName	lastName	dateOfCrime	
Jousef	Levi	Yaakoub	2022-11-11	

Result 22	
Output	
Action Output	
#	Time
17	23:06:00
18	23:07:29

19. Select s.firstName, s.middleName, s.lastName from suspect as s
inner join location as l on l.LocationID = s.locationID
inner join building as b on b.buildingid = l.buildingid where b.floorNB = 10;
selects full name of the suspects who lives in floor number 10.

Result Grid		Filter Rows:	Export:	Wrap Cell Contents:
firstName	middleName	lastName		
Elie	Saleh	Marjeh		
Ghofran	Rasoul	Hashem		

Result 23	
Output	
Action Output	
#	Time
23	23:09:30
24	23:09:40

20. Select s.firstName, s.MiddleName, s.LastName, m.FirstName as motherFirstName, m.LastName
as MotherLastName from suspect as s
left join motherinfo as m on m.motherId = s.motherID;
selects suspects name and his mother's name.

Result Grid					
Filter Rows:					
Export:	Wrap Cell Contents:				
FirstName	MiddleName	LastName	motherFirstName	MotherLastName	
Anas	Mahdi	Ballout	Emily	Mostafa	
Amir	Mostafa	Baidar	Emily	Mostafa	
Elie	Saleh	Marjeh	Aliyeh	Nour ElDine	
Liza	Leonardo	Tawil	Clara	Shebaa	
Ghofran	Rasoul	Hashem	Sara	Hasan	
Jousef	Levi	Yaakoub	Jasmine	Halal	
Meriam	William	Kansou			
Yasin	Alexander	Lakis	Hiba	Fakh	
Mohammad	Hassan	Mohsen	Mariam	Aliweyeh	
Yousef	Michael	Yousef			
Gamila	Mostfah	Baidar	Emily	Mostafa	
Tony	Issa	Khalil			

Result 27 x

Output

Action Output

#	Time	Action	Message
28	23:11:03	Select s.FirstName, s.MiddleName, s.LastName, m.FirstName, m.LastName from suspect as s ...	121
29	23:11:38	Select s.FirstName, s.MiddleName, s.LastName, m.FirstName as motherFirstName, m.LastName...	121

d) 5 Views.

21. Create view Suspects_With_CriminalRecord as
 select s.FirstName, s.Middlename, s.lastname, s.gender, s.DateOfBirth, c.CrimeType from
 suspect as s inner join CriminalRecord as c on c.CrimeID = s.CrimeID where c.Record = "Yes";
 select * from Suspects_With_CriminalRecord;

Result Grid					
Filter Rows:					
Export:	Wrap Cell Contents:				
FirstName	Middlename	lastname	gender	DateOfBirth	CrimeType
Anas	Mahdi	Ballout	Male	2001-01-03	Killed Teenager
Elie	Saleh	Marjeh	Male	1964-12-12	Drug Dealing
Liza	Leonardo	Tawil	Female	1996-03-01	Drug Dealing
Jousef	Levi	Yaakoub	Male	1992-10-09	Killed Adult
Meriam	William	Kansou	Female	2000-02-02	Killed Adult

Suspects_With_CriminalRecord 28 x

Output

Action Output

#	Time	Action	Message
31	23:32:26	Create view Suspects_With_CriminalRecord as select s.FirstName, s.Middlename, s.lastname...	0 row(s) affected
32	23:32:43	select * from Suspects_With_CriminalRecord LIMIT 0, 1000	8 row(s) returned

22. create view Mother_whose_Kid_did_Crime as
 select m.FirstName, m.lastname, m.phoneNumber from motherinfo as m inner join suspect as
 s on m.MotherID = s.MotherId inner join criminalrecord as c on c.CrimeID = s.CrimeID where
 c.record = "Yes";
 select * from Mother_whose_Kid_did_Crime;

Result Grid		
Filter Rows:		
Export:	Wrap Cell Contents:	
FirstName	lastname	phoneNumber
Aliyeh	Nour ElDine	81-983546
Clara	Shebaa	30-025647
Jasmine	Halal	80-963447
Mariam	Aliweyeh	76-763544

Mother_whose_Kid_did_Crime 29 x

Output

Action Output

#	Time	Action
34	23:40:29	create view Mother_whose_Kid_did_Crime as select m.FirstName, m.lastname, m.phoneNum...
35	23:40:46	select * from Mother_whose_Kid_did_Crime LIMIT 0, 1000

23. create view Wife_Married_To_Criminal as
 select w.FirstName, w.lastname, w.phoneNumber from wifeinfo as winner join suspect as s on
 w.wifeid = s.wifeid inner join criminalrecord as c on c.CrimeID = s.CrimeID where c.record =
 "Yes";
 select * from Wife_Married_To_Criminal;

Result Grid		
Firstname	lastname	phoneNumber
Jana	Mortadah	76-256748
Mariam	Hammoud	32-639254

Wife_Married_To_Criminal 30		
Output		
#	Time	Action
36	23:42:15	create view Wife_Married_To_Criminal as select w.Firstname, w.lastname, w.phoneNumber ...
37	23:42:18	select * from Wife_Married_To_Criminal LIMIT 0, 1000

24. create view Suspects_With_Multiple_PhoneNb as
 select s.firstname, s.middlename, s.lastname from suspect as sinner join suspectphonenb as sp
 on sp.suspectID = s.SuspectIDgroup by sp.suspectID having count(personalPhoneNb) > 1;
 select * from Suspects_With_Multiple_PhoneNb;

Result Grid		
firstname	middlename	lastname
Amir	Mostafa	Baidar
Tony	Issa	Khalli

Suspects_With_Multiple_Phone...		
Output		
#	Time	Action
43	23:46:58	create view Suspects_With_Multiple_PhoneNb as select s.firstname, s.middlename, s.lastnam...
44	23:47:01	select * from Suspects_With_Multiple_PhoneNb LIMIT 0, 1000

25. create view Suspects_with_Round_Body as
 select s.firstName, s.middlename, s.lastName, b.height, b.weight from suspect as s inner join
 body as b on b.bodyId = s.BodyID where b.bodyshape = "Round" order by s.FirstName asc;
 select * from Suspects_with_Round_Body;

Result Grid				
firstName	middlename	lastName	height	weight
Amir	Mostafa	Baidar	1.56	66.40
Gamila	Mostfah	Baidar	1.71	86.80
Liza	Leonardo	Tavil	1.59	80.50

Suspects_with_Round_Body32		
Output		
#	Time	Action
46	23:52:47	create view Suspects_with_Round_Body as select s.firstName, s.middlename, s.lastName, b....
47	23:53:03	select * from Suspects_with_Round_Body LIMIT 0, 1000

e) 5 Stored procedures

26. Procedure that stores all suspects' full names having multiple phone numbers.

DELIMITER \$\$

```
create Procedure getSuspects() begin
select firstName, Middlename, lastName, personalPhoneNb
from suspect as s inner join suspectphonenb as sp
on sp.suspectID = s.SuspectID
order by firstname;
```



```
end $$
delimiter ;
call getSuspects();
```

firstName	Middenname	lastfName	personalPhoneNb
Amr	Mostafa	Baidar	76-994567
Amr	Mostafa	Baidar	81-287425
Anas	Mahdi	Ballout	76-875345
Jousef	Levi	Yaakoub	81-395427
Liza	Leonardo	Tawil	03-532297
Meriam	William	Kansou	71-356743
Tony	Issa	Khalli	32-220054
Tony	Issa	Khalli	80-100423
Yasin	Alexander	Lakis	76-338812

#	Time	Action
1	00:25:27	call getSuspects()

27. Procedure that stores locations of all suspects and their full names.

```
DELIMITER //
create procedure getLocation() begin
select s.firstname, s.middlename, s.lastname, l.city, l.country, l.address, b.floornb,
a.apartmentnb
from suspect as s inner join location as l on l.LocationId = s.LocationID
inner join building as b on b.BuildingID = l.BuildingID
inner join apartment as a on a.BuildingID = b.BuildingID;
end //
DELIMITER ;
call getLocation();
```

firstName	middlename	lastname	city	country	address	floornb	apartmentnb
Meriam	William	Kansou	Akkar	Lebanon	Jouna	1	310
Liza	Leonardo	Tawil	Baalbak	Lebanon	Wadi	15	302
Liza	Leonardo	Tawil	Baalbak	Lebanon	Wadi	15	719
Elie	Saleh	Marjeh	Beirut	Lebanon	Ain El-Mreisse	10	821
Yasin	Alexander	Lakis	Beirut	Lebanon	Snoubra	3	101
Yasin	Alexander	Lakis	Beirut	Lebanon	Snoubra	3	104
Mohammad	Hassan	Mohsen	Akkar	Lebanon	Qaitea	3	101
Mohammad	Hassan	Mohsen	Akkar	Lebanon	Qaitea	3	104
Ghofran	Rasoul	Hashem	Beirut	Lebanon	Hamra	10	821
Tony	Issa	Khalli	Nabatieh	Lebanon	Raoucheh	11	415
Jousef	Levi	Yaakoub	Nabatieh	Lebanon	Raoucheh	11	415
Gamila	Mostfah	Baidar	Beirut	Lebanon	Ain El-Tine	6	616
Gamila	Mostfah	Baidar	Beirut	Lebanon	Ain El-Tine	6	626
Yousef	Michael	Yousef	Beirut	Lebanon	Ain El-Tine	6	616
Yousef	Michael	Yousef	Beirut	Lebanon	Ain El-Tine	6	626
Amr	Mostafa	Baidar	Beirut	Lebanon	Dar Beirut	6	070

#	Time	Action	Message	Duration /
1	00:25:27	call getLocation()	9 row(s) returned	0.000 sec.

28. Procedure that stores number of all crimes.

```
DELIMITER //
create procedure getNumberOfEachCrime() begin
Declare nbOfCrime int default 0;
select count(crimeType) into nbOfCrime
from criminalrecord;
select nbOfCrime;
end //
```

```
DELIMITER ;
call getNumberOfEachCrime();
```

Result 3 x

Output

#	Time	Action	Message
30	00:48:41	create procedure getNumberOfEachCrime() begin De...	0 row(s) affected
31	00:48:44	call getNumberOfEachCrime()	1 row(s) returned

29. Procedure that stores Mother and Wife info of the suspect.

```
DELIMITER //
create procedure getMother_Wife_Info() begin
select s.firstname as SFirstName, s.LastName as SLastName,
m.FirstName as MFirstName, m.lastName as MLastName,
w.FirstName as WFirstName, w.LastName as WLastName
from suspect as s
inner join wifeinfo as w on s.wifeld = w.WifeID
inner join motherinfo as m on m.MotherID= s.MotherID;
end //
DELIMITER ;
call getMother_Wife_Info();
```

Result 5 x

Output

SFirstName	SLastName	MFirstName	MLastName	WFirstName	WLastName
Amir	Baidar	Emily	Mostafa	Lara	Srou
Elle	Marjeh	Aliyeh	Nour ElDine	Jana	Mortadah
Ghofran	Hashem	Sara	Hasan	Clara	Smeaa
Yasin	Lakos	Hiba	Fakh	Emily	James
Mohammad	Mohsen	Mariam	Alliveyeh	Mariam	Hammoud

Result 5 x

Output

#	Time	Action	Message
38	01:01:01	create procedure getMother_Wife_Info() begin select s.firstname as SFirstName, s.LastName as ...	0 row(s) affected
39	01:01:04	call getMother_Wife_Info()	5 row(s) returned

30. Procedure that stores suspects with one hand.

```
DELIMITER $$
create procedure getSuSpectWithOneHand() begin
select firstname, lastname from suspect as s
inner join body as b on s.bodyId = b.BodyID
inner join hands as h on h.handID = b.HandID
where h.HandNumber = 1;
end $$
DELIMITER ;
call getSuSpectWithOneHand();
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
firstname	lastname			
Meriam	Kansou			
Mohammad	Mohsen			
Gamila	Baidar			

#	Time	Action	
43	01:08:38	create procedure getSuSpectWithOneHand() begin select firstname, lastname from suspect as ...	0
44	01:08:40	call getSuSpectWithOneHand()	3

f) 5 Triggers

31. A trigger that triggers a message if wife id is less than 4.

```

DELIMITER //
create trigger After_insert_Suspect
after insert on suspect
for each row begin
if new.wifeld < 4
then SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'Wife Id must be less than 4';
end if;
end //
DELIMITER ;
insert into suspect values (13, "Hadi", "Dawoud", "Nororozi", "Male", "1994-02-03", 2, 3,4,5, 3);

```

158	03:13:48	create trigger before_insert_Suspect after insert on suspect for each row begin if new.wifeld < 4	0 row(s) affected
159	03:13:51	insert into suspect values (13, "Hadi", "Dawoud", "Nororozi", "Male", "1994-02-03", 2, 3, 4, 5 ...	Error Code: 1644. Wife Id must be less than 4

Creating Users:

create user nour@"localhost" identified by
"admin" with max_connections_per_hour 100

max_queries_per_hour 1000

max_updates_per_hour 200

max_user_connections 5;

create user mahdi@'%' identified by "@3412\$" with max_connections_per_hour 90

max_queries_per_hour 500

max_updates_per_hour 20

max_user_connections 5;

create user ali@"localhost" identified by
"ali1234" with

max_connections_per_hour 80

max_queries_per_hour 1100

max_updates_per_hour 230

max_user_connections 12;

create user zeinab@'%' identified by
'zizi@345\$'with

max_connections_per_hour 30

max_queries_per_hour 800

max_updates_per_hour 130

max_user_connections 9

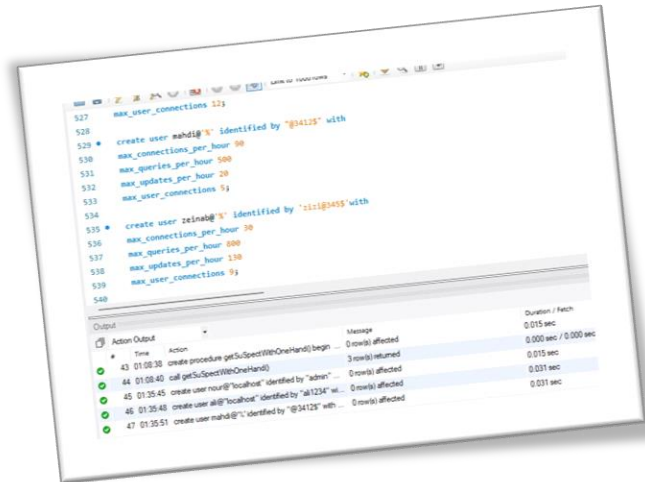
create user nano@'localhost' identified by 'n8n0'with

max_connections_per_hour 200

max_queries_per_hour 3000

max_updates_per_hour 500

max_user_connections 8



Giving permission for users:

- a) Giving user Nour to select, update, and delete from database suspect.

grant select, update, delete on suspect.* to nour@'localhost';

- b) Giving permission for user Mahdi with no privileges.

grant usage on suspect.* to mahdi@'%';

- c) Giving permission for user Ali to select only from table suspect in the database suspect.

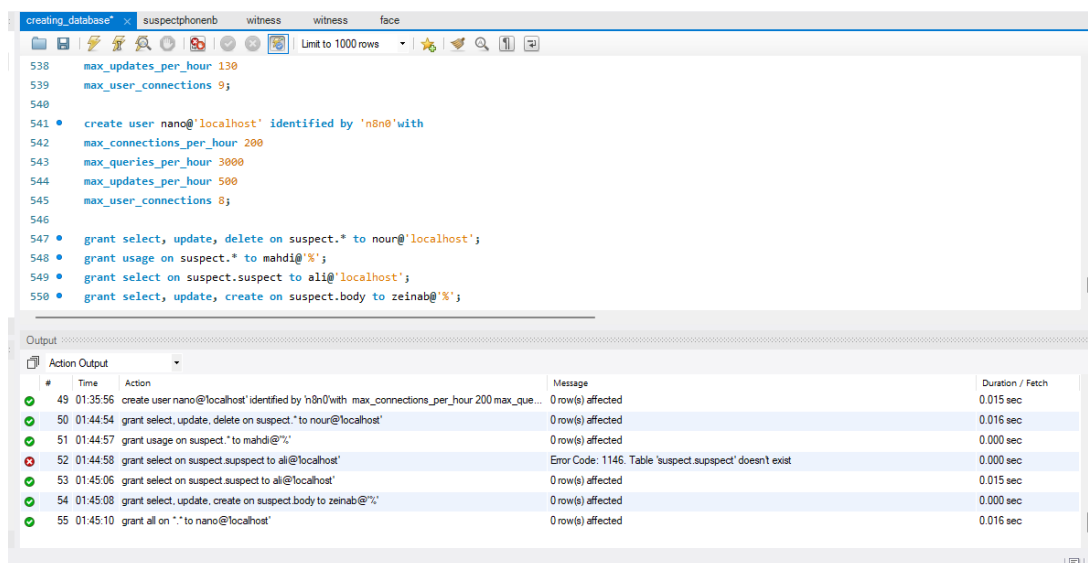
grant select on suspect.suspect to ali@'localhost';

- d) Giving permission for user zeinab to select, update and create from the table body in the suspect database.

grant select, update, create on suspect.body to zeinab@'%';

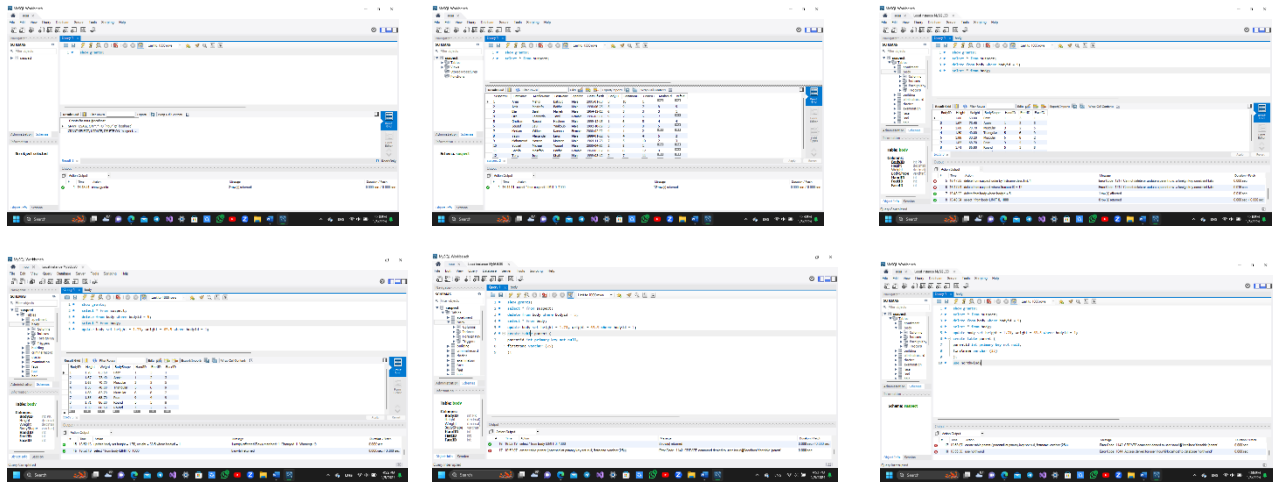
- e) Giving user Nano all permissions to use all databases.

grant all on *.* to nano@'localhost';



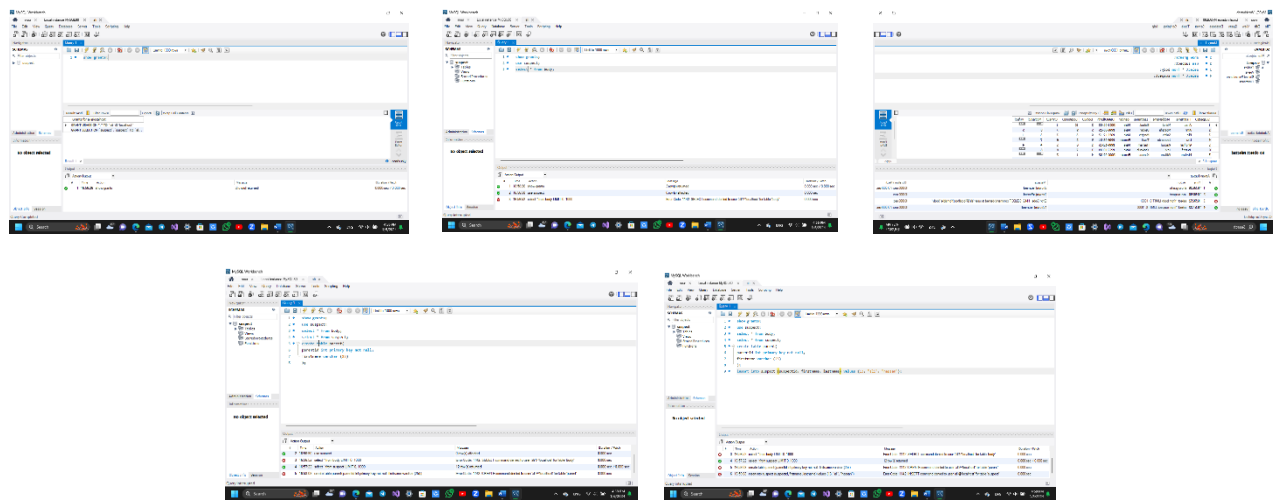
User Nour:

Can performs select, update and delete in suspect database but can't do anything else.

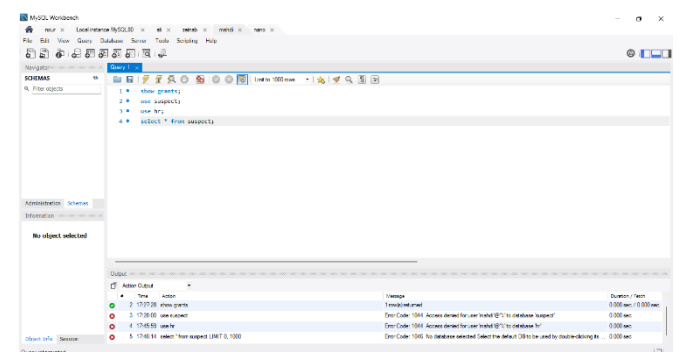
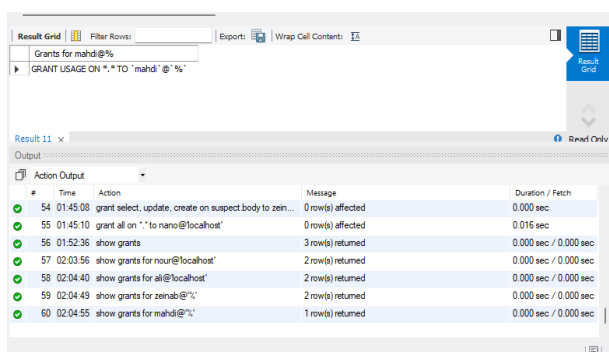


User Ali:

Can select only with table suspect in suspect database and can't perform any other actions.

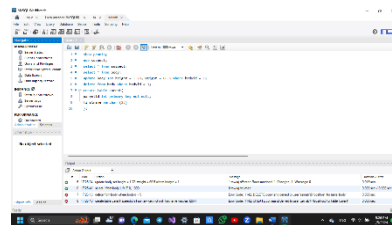
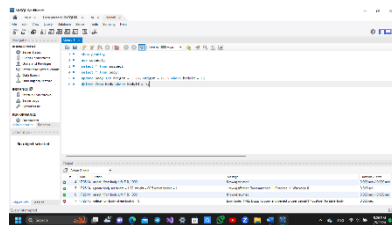
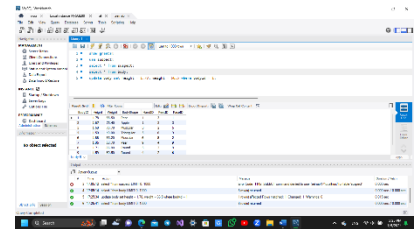
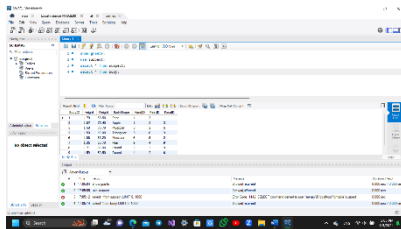
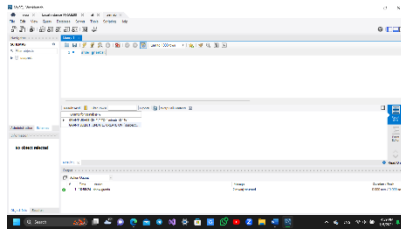


User Mahdi:



User Zeinab:

can select, update and create on the body table in suspect database and can't do anything else.



User Nano:

user nano can perform any action like using suspect, hr or Northwind database and select, delete or create etc. on any database.

