Database Research

2019-2020

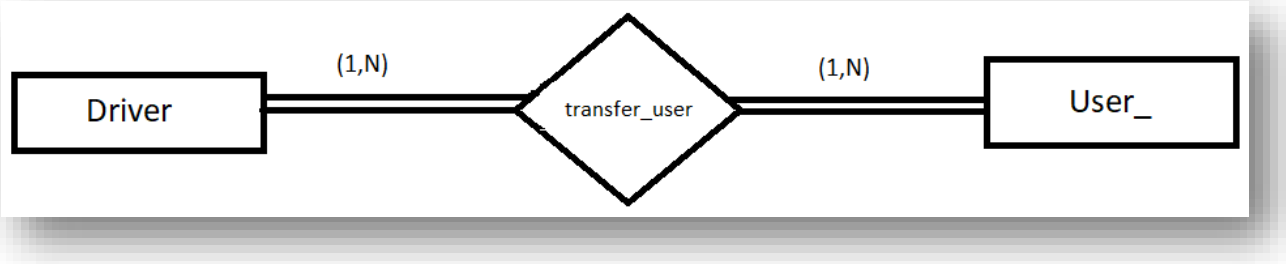
Transportation System

ENTITY	**STRONG/WEAK**	**ATTRIBUTES**
ADMIN	Strong	(AdminID - AdminName)
USER_	Strong	(UserID – name – address - phone)
DRIVER	Strong	(DriverID – name – address - phone)
VEHICLE	Weak	(LicenseNo – model – make - color)
RIDE_PAYMENT	Strong	(PaymentNo - PaymentType)
VEHICLE_TYPE	Strong	(TypeNo - type)
PROMOCODE	Weak	(code)
TRIP_DETAILS	Weak	(StartTime – RideFees - destination(street-city))
RIDE_RATING	Weak	(rate - feedback)
RIDE_HISTORY	Weak	(day - time(StartTime-EndTime) - destination(street-city))

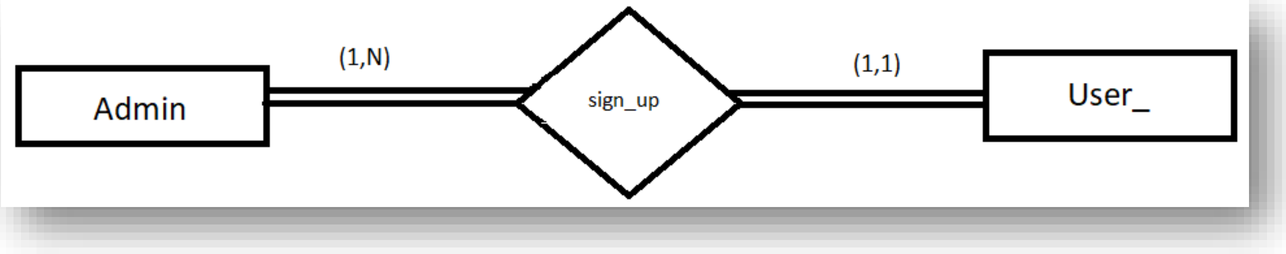
	RELATIONSHIP TYPE	BETWEEN	CARDINALITY	PARTICIPATION
1	transfer_user	Driver - User_	M:N	mandatory - mandatory
2	Sign up	Admin - User_	1:N	mandatory - mandatory
3	*Update details*	User_ - User_	1:1	mandatory - mandatory
4	Add/update	Admin - Ride_Payment	1:N	optional - mandatory
5	show_vehicle	User_ - Vehicle_type	M:N	mandatory - mandatory
6	has	Driver - Vehicle	1:N	mandatory - mandatory
7	has	Vehicle - Vehicle_type	N:1	mandatory - optional
8	u-t	User_ - Trip_details	1:N	optional - mandatory
9	d-t	Driver - Trip_details	1:N	optional - mandatory
10	v-t	Vehicle - Trip_details	1:N	optional - mandatory
11	r-t	Ride_Payment - Trip_details	1:N	optional - mandatory
12	give	User_ - Ride_rating	1:N	optional - mandatory
13	get	Driver - Ride_rating	1:N	optional - mandatory
14	keep	User_ - Ride_history	1:N	optional - mandatory
15	keep	Driver - Ride_history	1:N	optional - mandatory
16	enter_promocode	User_ - Promocode	M:N	optional - mandatory

<u>Report:</u>

1) There are many driver can transfer many users in this system.

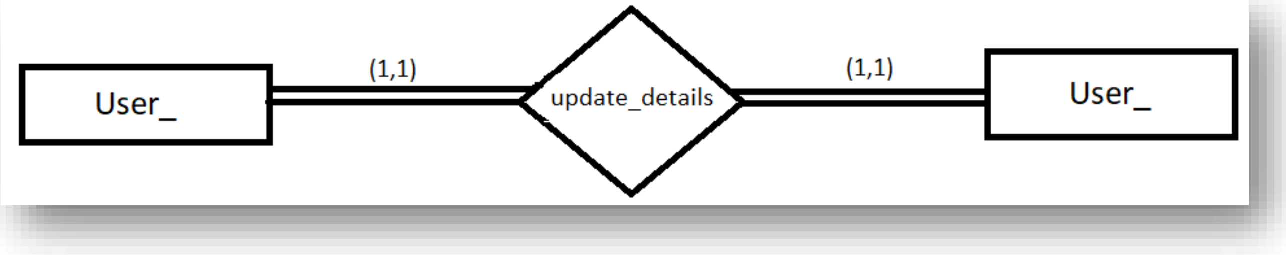


2) There are only one admin can sign up many users.

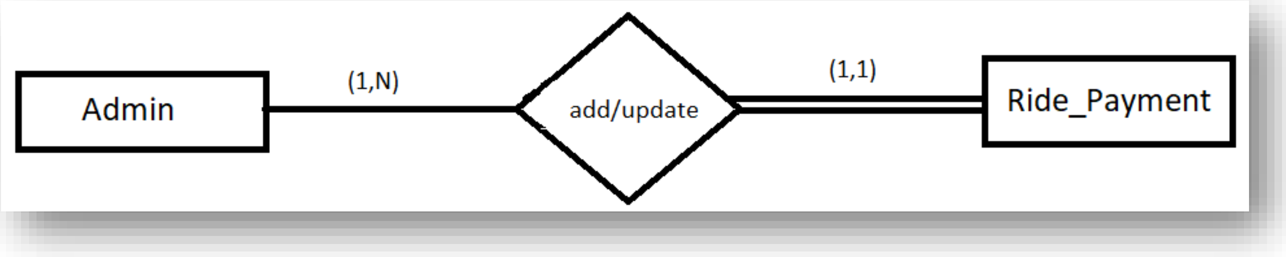


3) Any user in the system can update his own details(name-address-phone).

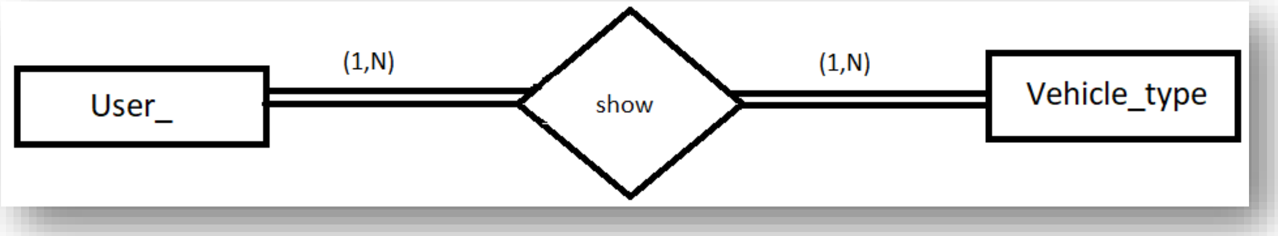
<u>Note</u>: * I can not put this relation in the ERD Diagram because there is no space remain in class user*



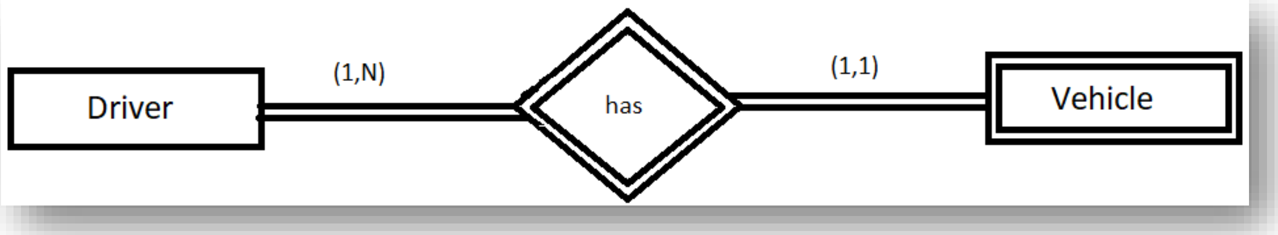
4) Admin can add or update many ride payments(visa-cash).



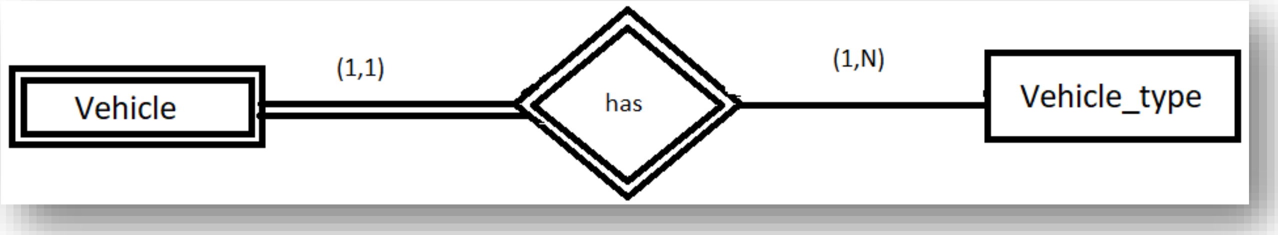
5) Every user can show all types of vehicles that are available in the system.



6) Every driver must have one vehicle at least and each vehicle owned by one driver only.

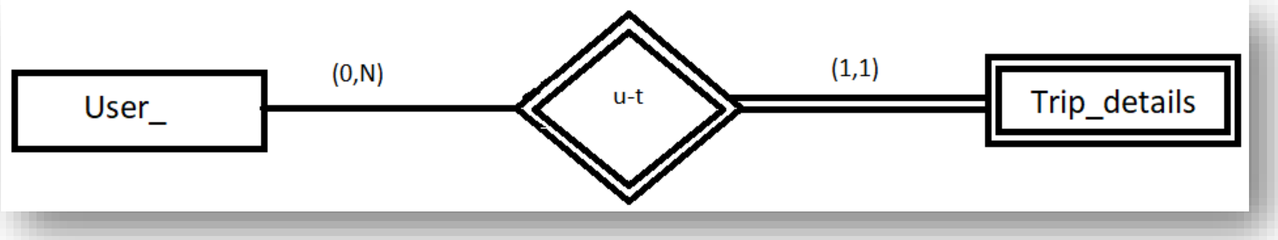


7) Each vehicle has only one type(bus-car-scooter) only.



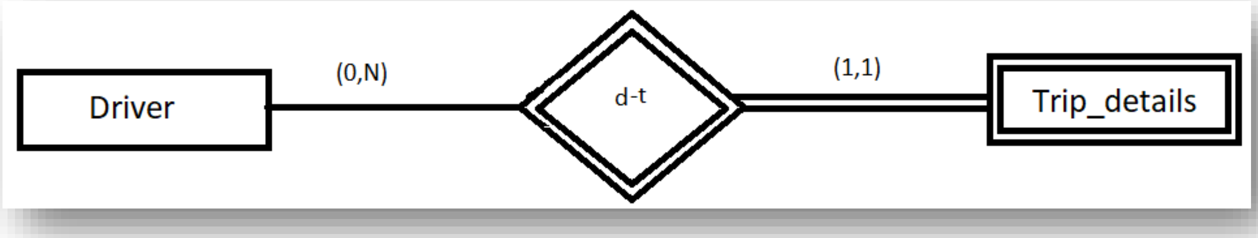
8) Each user has a trip details

- If the user did not make any trip yet then trip_details cardinality is 0.
- If the user make one or more then trip_details cardinality is 1 or N.
- The user cardinality is always 1.



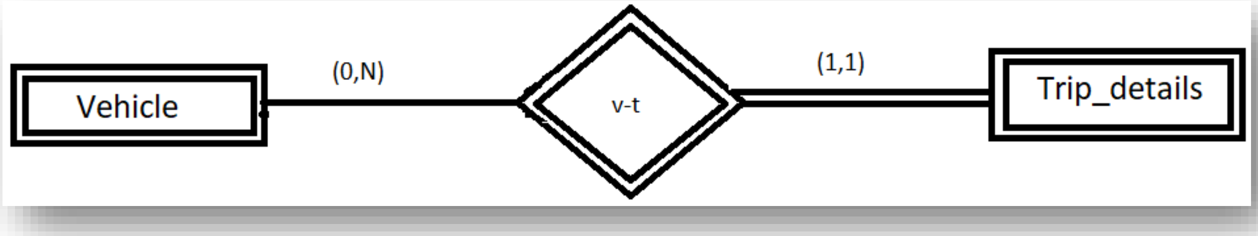
9) Each driver has a trip details

- If the driver did not make any trip yet then trip_details cardinality is 0.
- If the driver make one or more then trip_details cardinality is 1 or N.
- The driver cardinality is always 1.



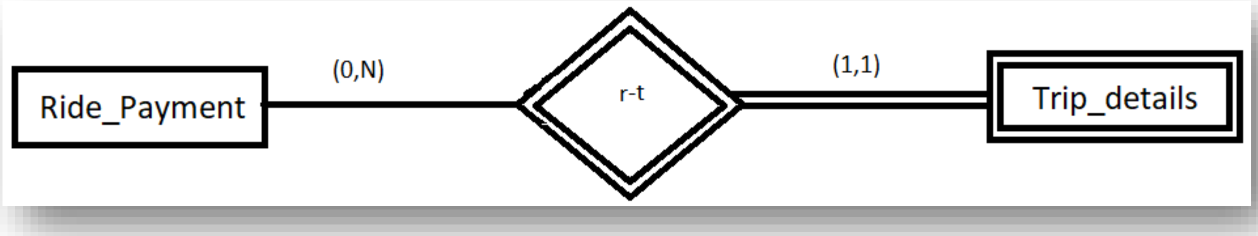
10) Each vehicle has a trip details

- If the driver that own the vehicle did not make any trip yet then trip_details cardinality is 0.
- If the driver of the vehicle make one or more then trip_details cardinality is 1 or N.
- The vehicle cardinality is always 1.



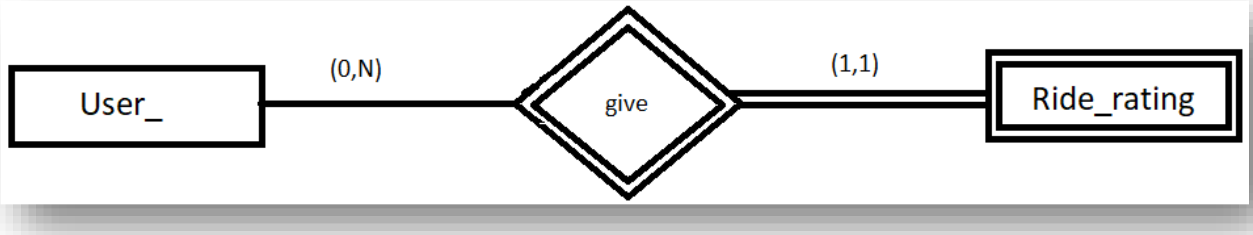
11) Each trip has a ride payment

- If the user that choose the ride payment did not make any trip yet then trip_details cardinality is 0.
- If the user that choose the ride payment make one or more then trip_details cardinality is 1 or N.
- The Ride_Payment cardinality is always 1.



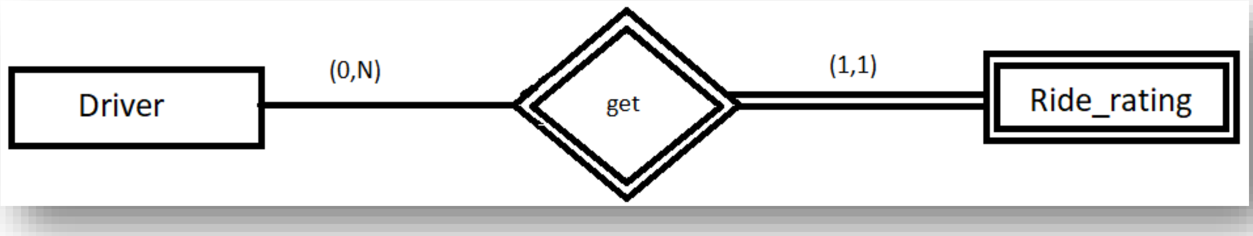
12) Each user give a ride rating for each driver per trip

- If the user did not make any trip yet then Ride_rating cardinality is 0.
- If the user make one or more then Ride_rating cardinality is 1 or N.
- The user cardinality is always 1.



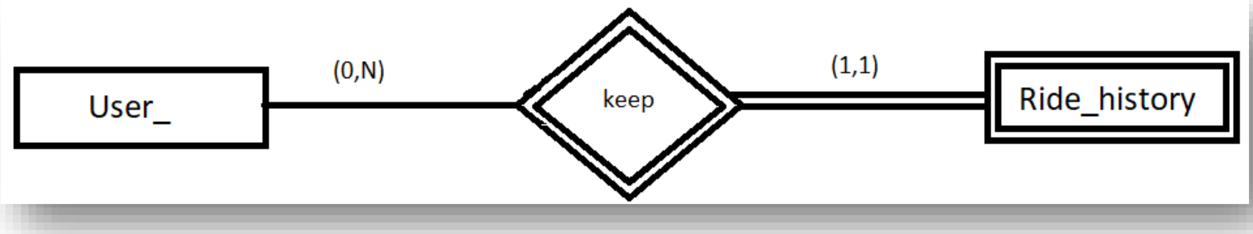
13) Each driver get a rating from each user per trip

- If the driver did not make any trip yet then Ride_rating cardinality is 0.
- If the driver make one or more then Ride_rating cardinality is 1 or N.
- The driver cardinality is always 1.



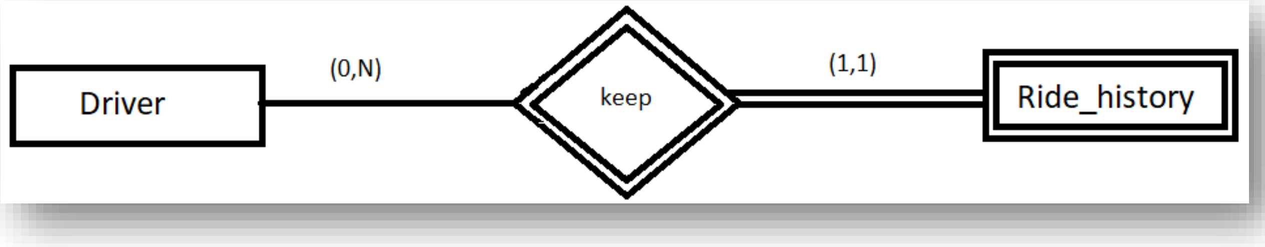
14) Each user keep a ride history for each trip

- If the user did not make any trip yet then Ride_rating cardinality is 0.
- If the user make one or more then Ride_rating cardinality is 1 or N.
- The user cardinality is always 1.

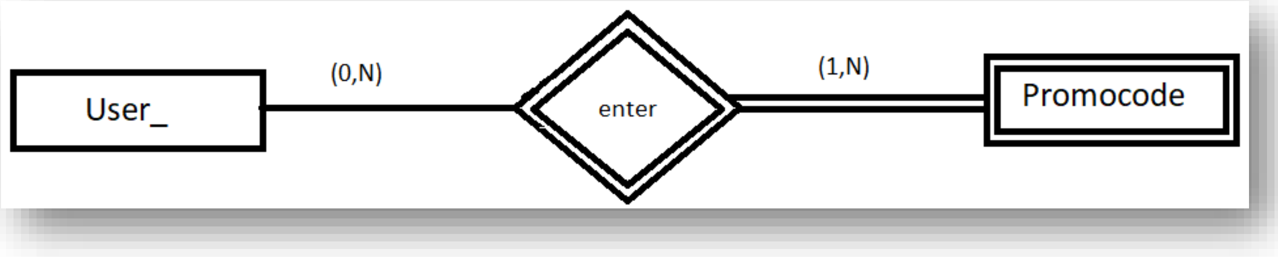


15) Each driver keep a ride history for each trip

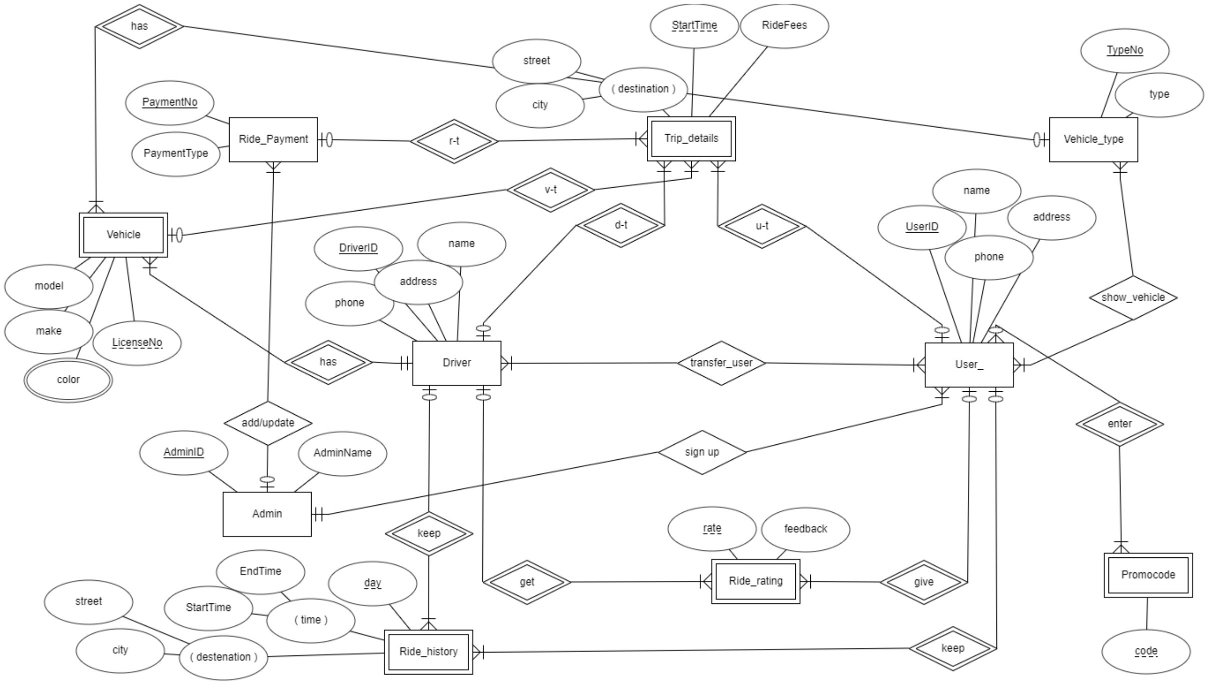
- If the driver did not make any trip yet then Ride_rating cardinality is 0.
- If the driver make one or more then Ride_rating cardinality is 1 or N.
- The user cardinality is always 1.



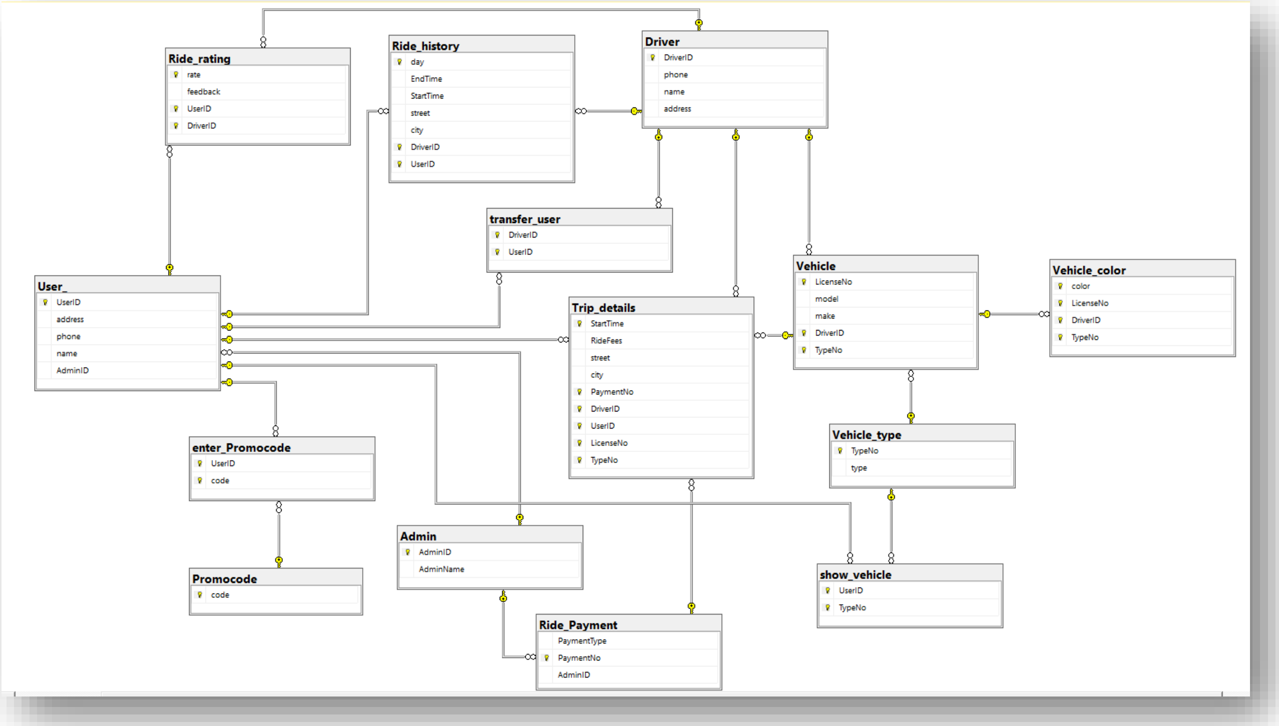
16) Each user can enter no promocodes or many promocodes, and also promocodes entered by many users.



Conceptual Model (ERD):



Physical model (Relational schema):



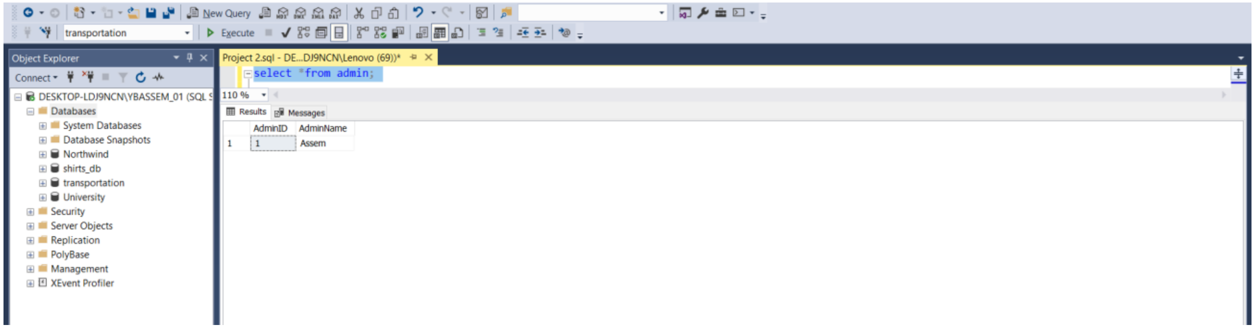
SQL Query code:

```
create database new_trans_system

CREATE TABLE Admin
(
  AdminID INT identity NOT NULL,
  AdminName VARCHAR(30) NOT NULL,
  PRIMARY KEY (AdminID)
);

CREATE TABLE User_
(
  UserID INT identity NOT NULL,
  address VARCHAR(50) NOT NULL,
  phone INT NOT NULL,
  name VARCHAR(30) NOT NULL,
  AdminID INT NOT NULL,
  PRIMARY KEY (UserID),
  FOREIGN KEY (AdminID) REFERENCES Admin(AdminID)
);

CREATE TABLE Driver
(
  DriverID INT identity NOT NULL,
  phone INT NOT NULL,
  name VARCHAR(30) NOT NULL,
  address VARCHAR(50) NOT NULL,
  PRIMARY KEY (DriverID)
);

CREATE TABLE Ride_Payment
(
  PaymentType VARCHAR(30) NOT NULL,
  PaymentNo INT NOT NULL,
  AdminID INT,
  PRIMARY KEY (PaymentNo),
  FOREIGN KEY (AdminID) REFERENCES Admin(AdminID)
);

CREATE TABLE Vehicle_type
(
  TypeNo INT identity NOT NULL,
  type VARCHAR(30) NOT NULL,
  PRIMARY KEY (TypeNo)
);

CREATE TABLE Promocode
(
  code VARCHAR(5) NOT NULL,
  PRIMARY KEY (code)
);

CREATE TABLE Ride_history
(
  day varchar(30) NOT NULL,
  EndTime Datetime NOT NULL,
  StartTime Datetime NOT NULL,
  DriverID INT,
  UserID INT,
  startingStreet VARCHAR(50) NOT NULL,
  destStreet varchar(50) NOT NULL,
  city VARCHAR(50) NOT NULL,
  PRIMARY KEY (day, DriverID, UserID),
  FOREIGN KEY (DriverID) REFERENCES Driver(DriverID),
  FOREIGN KEY (UserID) REFERENCES User_(UserID)
);

CREATE TABLE Ride_rating
(
  rate FLOAT NOT NULL,
  feedback VARCHAR(50) NOT NULL,
  UserID INT,
  DriverID INT,
  PRIMARY KEY (rate, UserID, DriverID),
  FOREIGN KEY (UserID) REFERENCES User_(UserID),
  FOREIGN KEY (DriverID) REFERENCES Driver(DriverID)
);

CREATE TABLE Vehicle
(
  LicenseNo INT NOT NULL,
  model VARCHAR(20) NOT NULL,
  make VARCHAR(20) NOT NULL,
  DriverID INT NOT NULL,
  TypeNo INT,
  PRIMARY KEY (LicenseNo, DriverID, TypeNo),
  FOREIGN KEY (DriverID) REFERENCES Driver(DriverID),
  FOREIGN KEY (TypeNo) REFERENCES Vehicle_type(TypeNo)
);

CREATE TABLE enter_Promocode
(
  UserID INT NOT NULL,
  code VARCHAR(5) NOT NULL,
  PRIMARY KEY (UserID, code),
  FOREIGN KEY (UserID) REFERENCES User_(UserID),
  FOREIGN KEY (code) REFERENCES Promocode(code)
);

CREATE TABLE transfer_user
(
  DriverID INT NOT NULL,
  UserID INT NOT NULL,
  PRIMARY KEY (DriverID, UserID),
  FOREIGN KEY (DriverID) REFERENCES Driver(DriverID),
  FOREIGN KEY (UserID) REFERENCES User_(UserID)
);

CREATE TABLE show_vehicle
(
  UserID INT NOT NULL,
  TypeNo INT NOT NULL,
  PRIMARY KEY (UserID, TypeNo),
  FOREIGN KEY (UserID) REFERENCES User_(UserID),
  FOREIGN KEY (TypeNo) REFERENCES Vehicle_type(TypeNo)
);

CREATE TABLE Vehicle_color
(
  color VARCHAR(30) NOT NULL,
  LicenseNo INT NOT NULL,
  DriverID INT NOT NULL,
  TypeNo INT NOT NULL,
  PRIMARY KEY (color, LicenseNo, DriverID, TypeNo),
  FOREIGN KEY (LicenseNo, DriverID, TypeNo) REFERENCES Vehicle(LicenseNo, DriverID,
TypeNo)
);

CREATE TABLE Trip_details
(
  RideFees FLOAT NOT NULL,
  PaymentNo INT,
  DriverID INT,
  UserID INT,
  LicenseNo INT,
  TypeNo INT,
  startingStreet VARCHAR(50) NOT NULL,
  destStreet varchar(50) NOT NULL,
  city VARCHAR(50) NOT NULL,
  StartTime DateTime NOT NULL,
  EndTime Datetime NOT NULL,
  PRIMARY KEY (StartTime, PaymentNo, DriverID, UserID, LicenseNo, TypeNo),
  FOREIGN KEY (PaymentNo) REFERENCES Ride_Payment(PaymentNo),
  FOREIGN KEY (DriverID) REFERENCES Driver(DriverID),
  FOREIGN KEY (UserID) REFERENCES User_(UserID),
  FOREIGN KEY (LicenseNo, DriverID, TypeNo) REFERENCES Vehicle(LicenseNo, DriverID,
TypeNo)
);

/* *************************************  */

SET IDENTITY_INSERT [dbo].[Admin] ON
GO

INSERT INTO [dbo].[Admin] ( [AdminID], [AdminName])
VALUES ( 1, 'Assem')
GO

SET IDENTITY_INSERT [dbo].[Admin] OFF
GO

SET IDENTITY_INSERT [dbo].[User_] ON
GO

insert into [dbo].[User_] ( [UserID], [address],[phone],[name],[AdminID] )
values
(4,'Dokki',192312322,'Sherif',1),
(5,'Giza',1221323122,'Omar',1),
(6,'Masr el gdeeda',123123232,'Mostafa',1),
(7,'Madent nasr',123123233,'Ahmed',1),
(8,'Mokattam',12323213,'Abdelrahman',1),
(9,'Haram',12312242,'Alaa',1)
```

```
GO

SET IDENTITY_INSERT [dbo].[User_] OFF
GO

SET IDENTITY_INSERT [dbo].[Driver] ON
GO

insert into [dbo].[Driver] ( [DriverID], [phone],[name],[address] )
values
(1,123123123,'Mostafa','Ramsees'),
(2,1665754323,'Alaa','Haram'),
(3,192323123,'Fawaz','Shobra'),
(4,970069769,'Ibrahim','Abbas el akkad'),
(5,1345643234,'Aly','Makram ebeid'),
(6,18232323,'Ahmed','Medan el Mahkama')
GO

SET IDENTITY_INSERT [dbo].[Driver] OFF
GO



insert into Ride_Payment
values
('Cash',1,1),
('Visa',2,1),
('Master card',3,1)

insert into Ride_history
values
('Monday','2020-11-05 05:20:00.000','2020-05-11 05:10:00.000',1,5,'Giza','El
Dokki','Giza')
,('Monday','2020-11-05 05:15:00.000','2020-05-11
04:00:00.000',2,8,'Makram','Mokatam','cairo')
,('Monday','2020-11-05 05:00:00.000','2020-05-11
04:20:00.000',3,7,'Ramsees','Giza','cairo')
,('Sunday','2020-10-05 09:20:00.000','2020-05-10 08:16:00.000',1,4,'ahmed
fakhry','imtedad ramsees','cairo')
,('Tuesday','2020-12-05 09:00:00.000','2020-05-12 07:00:00.000',4,6,'Medan el mahkma','EL
tagamoa','cairo')
,('Tuesday','2020-12-05 09:15:00.000','2020-05-12
08:15:00.000',5,4,'Haram','Giza','Giza');

insert into Ride_rating
values
(3,'good',8,2),
(4,'very good',4,1),
(4,'very good',4,5),
(4,'very good',6,4),
(4,'very good',7,3),
(5,'Excellent',5,1)

SET IDENTITY_INSERT [dbo].[Vehicle_type] ON
GO

insert into [dbo].[Vehicle_type] ( [TypeNo],[type] )
values
```

```
(1,'car'),
(2,'bus'),
(3,'scooter')
go

SET IDENTITY_INSERT [dbo].[Vehicle_type] OFF
GO

insert into Vehicle
values
(12345,2020,'Tesla',1,1),
(12543,2020,'Chevrolet',4,2),
(13452,2020,'Mercedes',3,2),
(14352,2020,'Peugeot',6,3),
(15324,2020,'BMW',5,3),
(54321,2020,'Range Rover',2,1)

insert into Vehicle_color
values
('Black',12345,1,1),
('Black',15324,5,3),
('Navy blue',54321,2,1),
('Navy red',13452,3,2),
('Silver',12543,4,2),
('white',14352,6,3)

insert into show_vehicle
values
(4,1),
(4,3),
(5,1),
(6,2),
(7,2),
(8,1)

insert into Trip_details
values
(35,1,1,4,12345,1,'ahmed fakhry','imtedad ramsees','cairo','2020-10-05
08:16:00.000','2020-10-05 09:20:00.000'),
(40,1,2,8,54321,1,'Makram','Mokatam','cairo','2020-11-05 04:00:00.000','2020-11-05
05:15:00.000'),
(35,3,3,7,13452,2,'Ramsees','Giza','cairo','2020-11-05 04:20:00.000','2020-11-05
05:00:00.000'),
(15,1,1,5,12345,1,'Giza','El Dokki','Giza','2020-11-05 05:10:00.000','2020-11-05
05:20:00.000'),
(60,2,4,6,12543,2,'Medan el mahkma','EL tagamoa','cairo','2020-12-05 07:00:00.000',
'2020-12-05 09:00:00.000'),
(30,1,5,4,15324,3,'Haram','Giza','Giza','2020-12-05 08:15:00.000','2020-12-05
09:15:00.000')
```

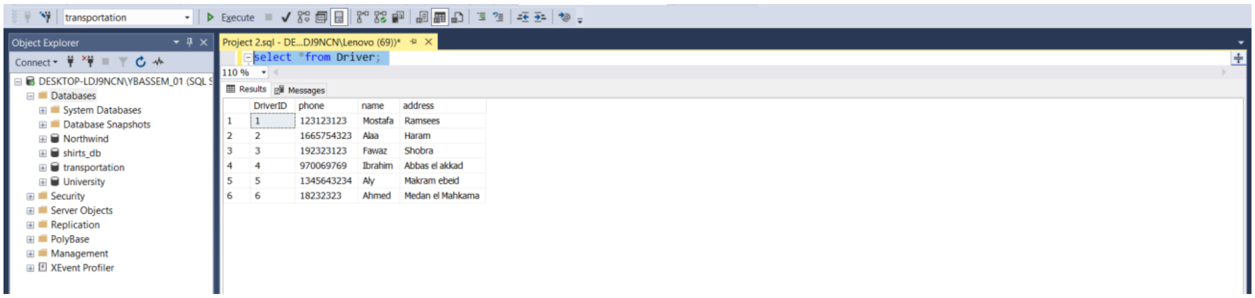
Table Admin



```sql
select *from admin;
```

	AdminID	AdminName
1	1	Assem

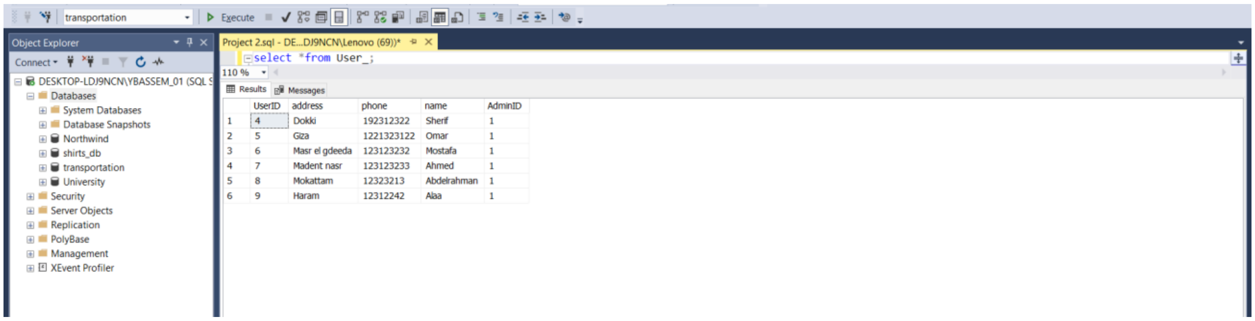
Table Driver



```sql
select *from Driver;
```

	DriverID	phone	name	address
1	1	123123123	Mostafa	Ramsees
2	2	1665754323	Alaa	Haram
3	3	192323123	Fawaz	Shobra
4	4	970069769	Ibrahim	Abbas el akkad
5	5	1345643234	Aly	Makram ebeid
6	6	18232323	Ahmed	Medan el Mahkama

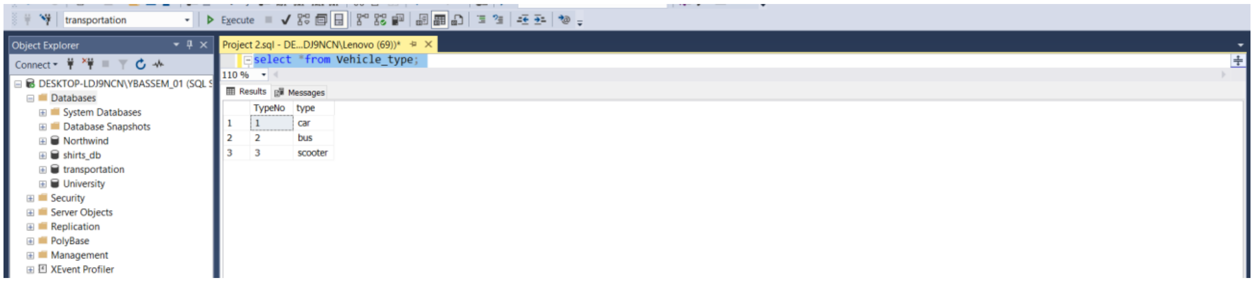
Table User_



```sql
select *from User_;
```

	UserID	address	phone	name	AdminID
1	4	Dokki	192312322	Sherif	1
2	5	Giza	1221323122	Omar	1
3	6	Masr el gdeeda	123123232	Mostafa	1
4	7	Madent nasr	123123233	Ahmed	1
5	8	Mokattam	12323213	Abdelrahman	1
6	9	Haram	12312242	Alaa	1

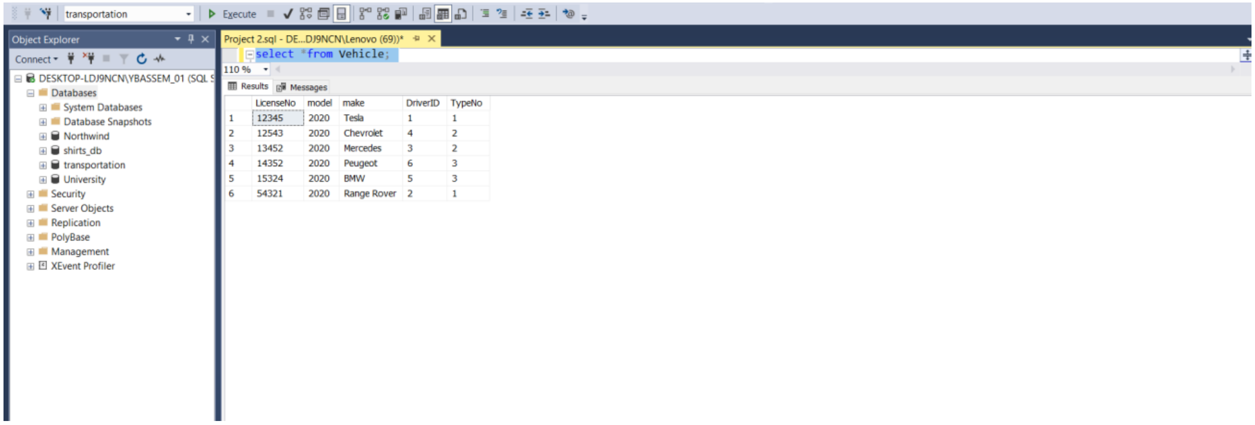
Table vehicle_type



```sql
select *from Vehicle_type;
```

	TypeNo	type
1	1	car
2	2	bus
3	3	scooter

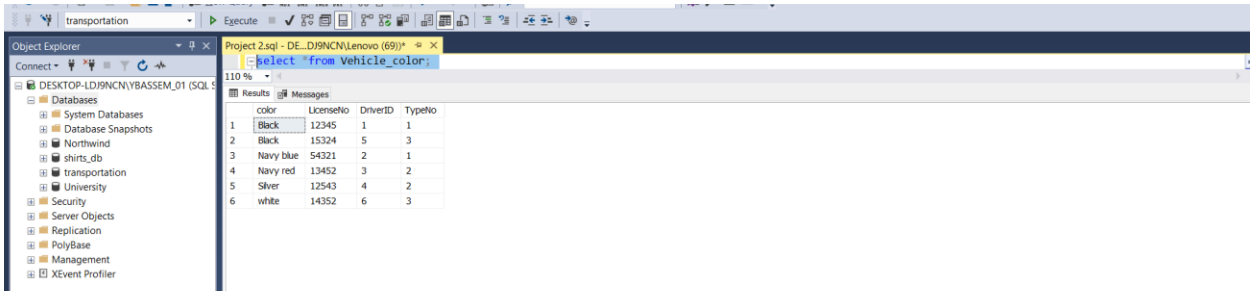
Table vehicle



```
select *from Vehicle;
```

	LicenseNo	model	make	DriverID	TypeNo
1	12345	2020	Tesla	1	1
2	12543	2020	Chevrolet	4	2
3	13452	2020	Mercedes	3	2
4	14352	2020	Peugeot	6	3
5	15324	2020	BMW	5	3
6	54321	2020	Range Rover	2	1

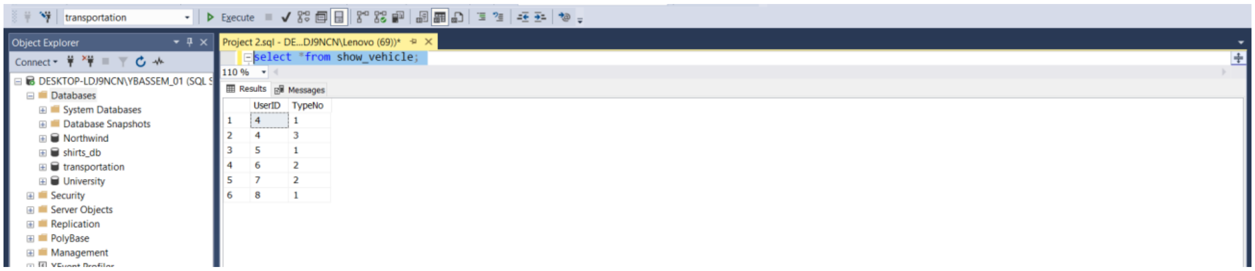
Table vehicle_color



```
select *from Vehicle_color;
```

	color	LicenseNo	DriverID	TypeNo
1	Black	12345	1	1
2	Black	15324	5	3
3	Navy blue	54321	2	1
4	Navy red	13452	3	2
5	Silver	12543	4	2
6	white	14352	6	3

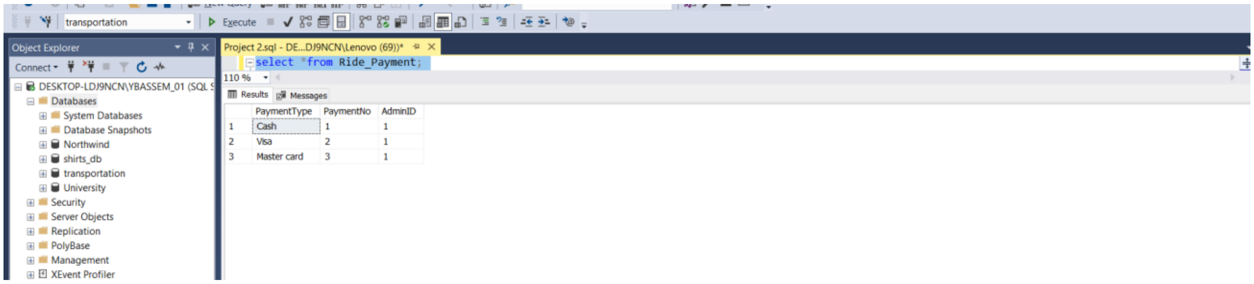
Table show_vehicle



```
select *from show_vehicle;
```

	UserID	TypeNo
1	4	1
2	4	3
3	5	1
4	6	2
5	7	2
6	8	1

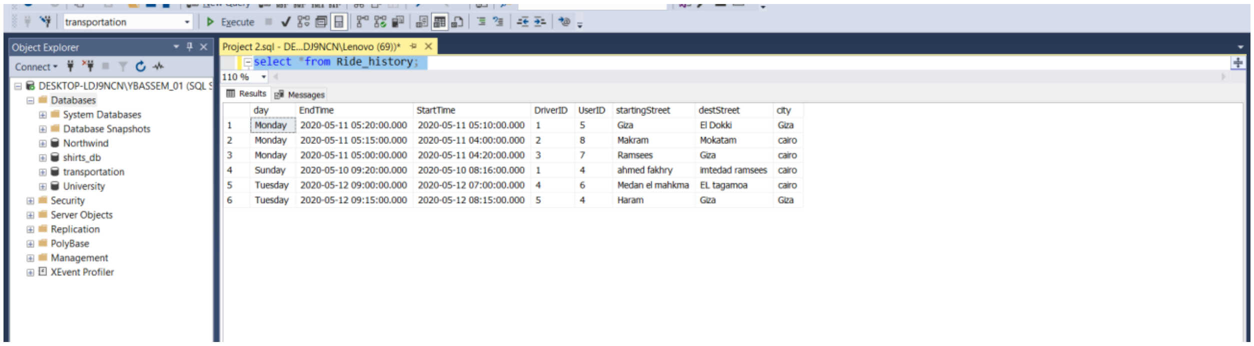
Table ride_payment



```
select *from Ride_Payment;
```

	PaymentType	PaymentNo	AdminID
1	Cash	1	1
2	Visa	2	1
3	Master card	3	1

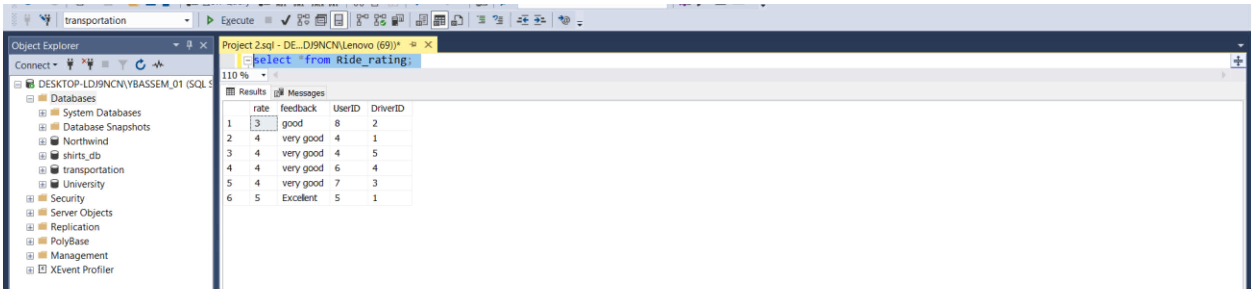
Table ride_history



```
select *from Ride_history;
```

	day	EndTime	StartTime	DriverID	UserID	startingStreet	destStreet	city
1	Monday	2020-05-11 05:20:00.000	2020-05-11 05:10:00.000	1	5	Giza	El Dokki	Giza
2	Monday	2020-05-11 05:15:00.000	2020-05-11 04:00:00.000	2	8	Makram	Mokatam	cairo
3	Monday	2020-05-11 05:00:00.000	2020-05-11 04:20:00.000	3	7	Ramsees	Giza	cairo
4	Sunday	2020-05-10 09:20:00.000	2020-05-10 08:16:00.000	1	4	ahmed fakhry	imtedad ramsees	cairo
5	Tuesday	2020-05-12 09:00:00.000	2020-05-12 07:00:00.000	4	6	Medan el mahkma	EL tagamoa	cairo
6	Tuesday	2020-05-12 09:15:00.000	2020-05-12 08:15:00.000	5	4	Haram	Giza	Giza

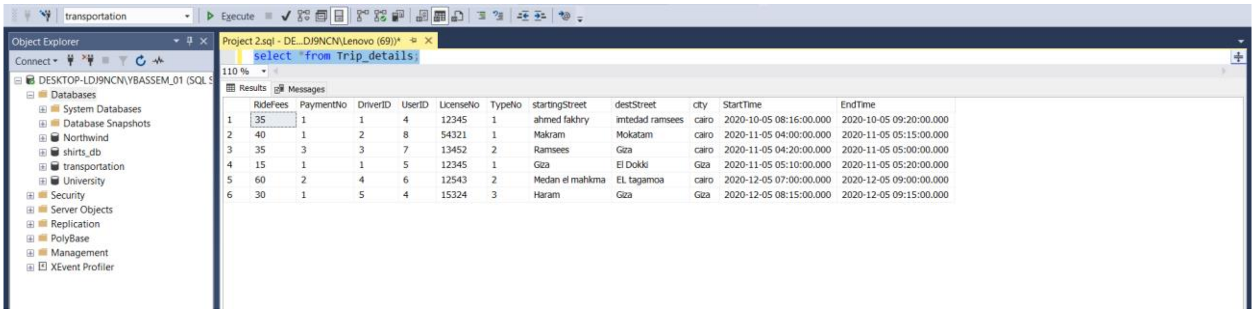
Table ride_rating



```
select *from Ride_rating;
```

	rate	feedback	UserID	DriverID
1	3	good	8	2
2	4	very good	4	1
3	4	very good	4	5
4	4	very good	6	4
5	4	very good	7	3
6	5	Excellent	5	1

Table trip_details

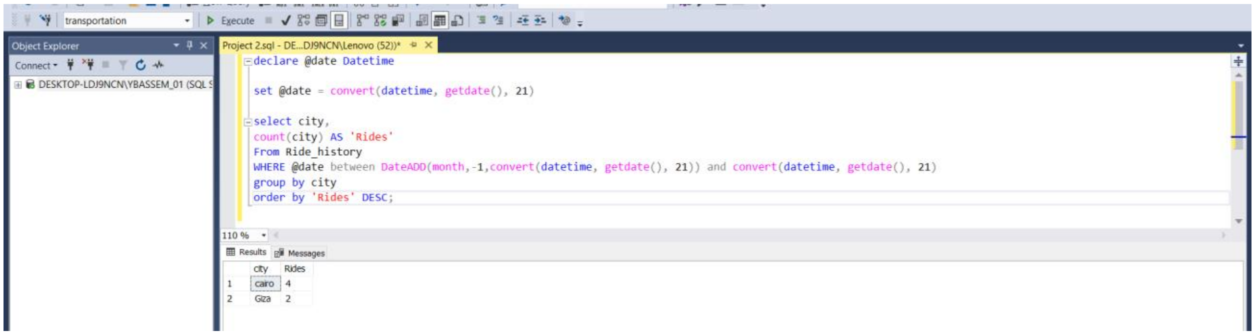


```
select *from Trip_details;
```

	RideFees	PaymentNo	DriverID	UserID	LicenseNo	TypeNo	startingStreet	destStreet	city	StartTime	EndTime
1	35	1	1	4	12345	1	ahmed fakhry	imtedad ramsees	cairo	2020-10-05 08:16:00.000	2020-10-05 09:20:00.000
2	40	1	2	8	54321	1	Makram	Mokatam	cairo	2020-11-05 04:00:00.000	2020-11-05 05:15:00.000
3	35	3	3	7	13452	2	Ramsees	Giza	cairo	2020-11-05 04:20:00.000	2020-11-05 05:00:00.000
4	15	1	1	5	12345	1	Giza	El Dokki	Giza	2020-11-05 05:10:00.000	2020-11-05 05:20:00.000
5	60	2	4	6	12543	2	Medan el mahkma	EL tagamoa	cairo	2020-12-05 07:00:00.000	2020-12-05 09:00:00.000
6	30	1	5	4	15324	3	Haram	Giza	Giza	2020-12-05 08:15:00.000	2020-12-05 09:15:00.000

Query 1:

```sql
declare @date Datetime

set @date = convert(datetime, getdate(), 21)

select city,
count(city) AS 'Rides'
From Ride_history
WHERE @date between DateADD(month,-1,convert(datetime, getdate(), 21)) and
convert(datetime, getdate(), 21)
group by city
order by 'Rides' DESC;
```

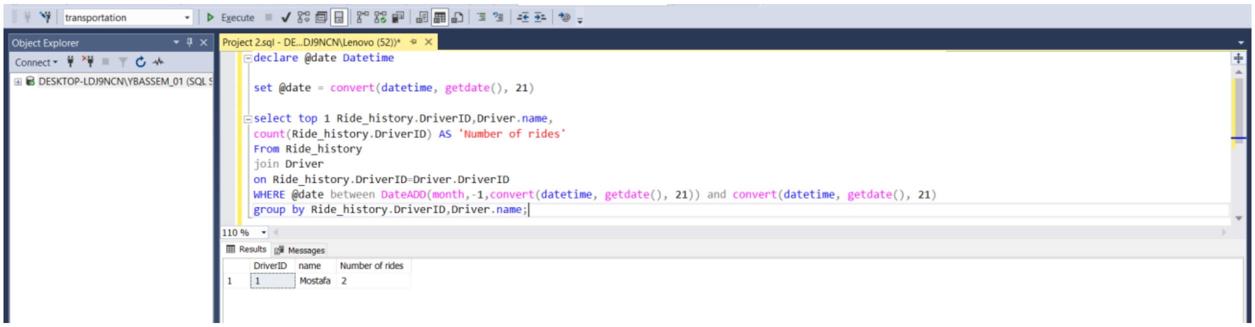

transportation
Execute
Object Explorer
Connect
DESKTOP-LDJ9NCN\YBASSEM_01 (SQL S
Project 2.sql - DE...DJ9NCN\Lenovo (52))*
110 %
Results
Messages

```sql
declare @date Datetime

set @date = convert(datetime, getdate(), 21)

select city,
count(city) AS 'Rides'
From Ride_history
WHERE @date between DateADD(month,-1,convert(datetime, getdate(), 21)) and convert(datetime, getdate(), 21)
group by city
order by 'Rides' DESC;
```

```
   city   Rides
1  cairo  4
2  Giza   2
```

Query 2:

```sql
declare @datee Datetime

set @datee = convert(datetime, getdate(), 21)

select top 1 Ride_history.DriverID,Driver.name,
count(Ride_history.DriverID) AS 'Number of rides'
From Ride_history
join Driver
on Ride_history.DriverID=Driver.DriverID
WHERE @datee between DateADD(month,-1,convert(datetime, getdate(), 21)) and
convert(datetime, getdate(), 21)
group by Ride_history.DriverID,Driver.name;
```

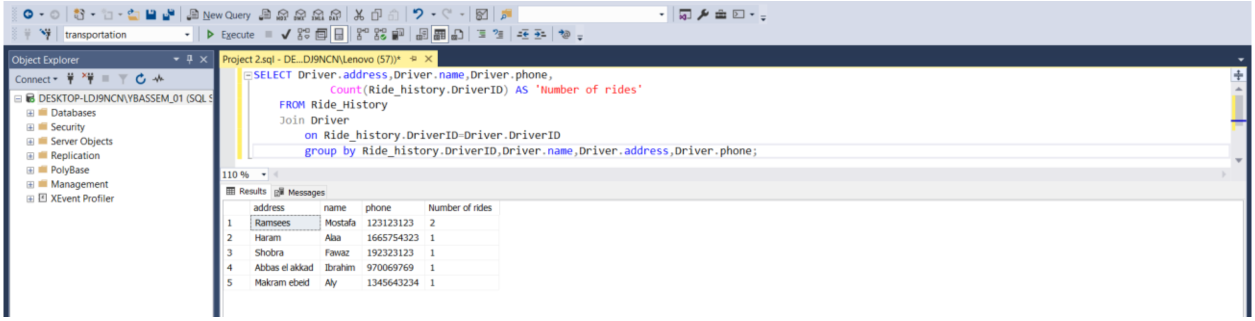

transportation
Execute
Object Explorer
Connect
DESKTOP-LDJ9NCN\YBASSEM_01 (SQL S
Project 2.sql - DE...DJ9NCN\Lenovo (52))*
110 %
Results
Messages

```sql
declare @date Datetime

set @date = convert(datetime, getdate(), 21)

select top 1 Ride_history.DriverID,Driver.name,
count(Ride_history.DriverID) AS 'Number of rides'
From Ride_history
join Driver
on Ride_history.DriverID=Driver.DriverID
WHERE @date between DateADD(month,-1,convert(datetime, getdate(), 21)) and convert(datetime, getdate(), 21)
group by Ride_history.DriverID,Driver.name;
```

```
   DriverID  name     Number of rides
1  1         Mostafa  2
```

Query 3:

```
Select Driver.address,Driver.name,Driver.phone,
                                   count(Ride_history.DriverID) AS 'Number of rides'
              From Ride_history
              join Driver
              on Ride_history.DriverID=Driver.DriverID
              group by Ride_history.DriverID,Driver.name,Driver.address,Driver.phone;
```

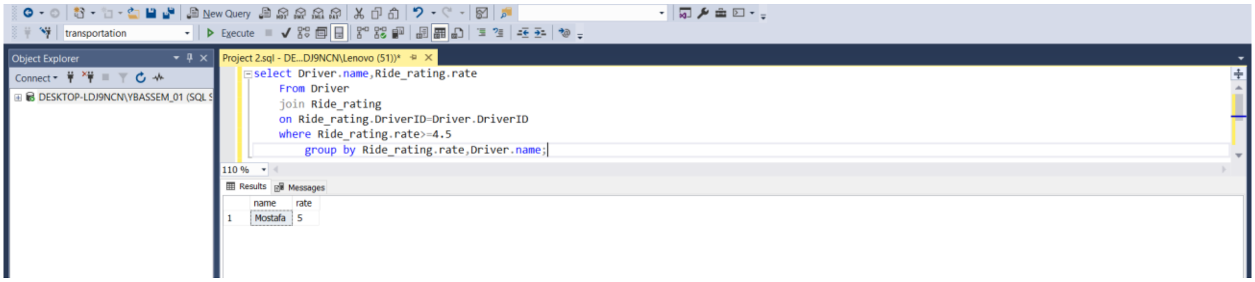


```
SELECT Driver.address,Driver.name,Driver.phone,
                 Count(Ride_history.DriverID) AS 'Number of rides'
      FROM Ride_History
      Join Driver
          on Ride_history.DriverID=Driver.DriverID
          group by Ride_history.DriverID,Driver.name,Driver.address,Driver.phone;
```

	address	name	phone	Number of rides
1	Ramsees	Mostafa	123123123	2
2	Haram	Alaa	1665754323	1
3	Shobra	Fawaz	192323123	1
4	Abbas el akkad	Ibrahim	970069769	1
5	Makram ebeid	Aly	1345643234	1

Query 4:

```
Select Driver.name,Ride_rating.rate
       From Driver
       join Ride_rating
       on Ride_rating.DriverID=Driver.DriverID
       where Ride_rating.rate>=4.5
              group by Ride_rating.rate,Driver.name;
```



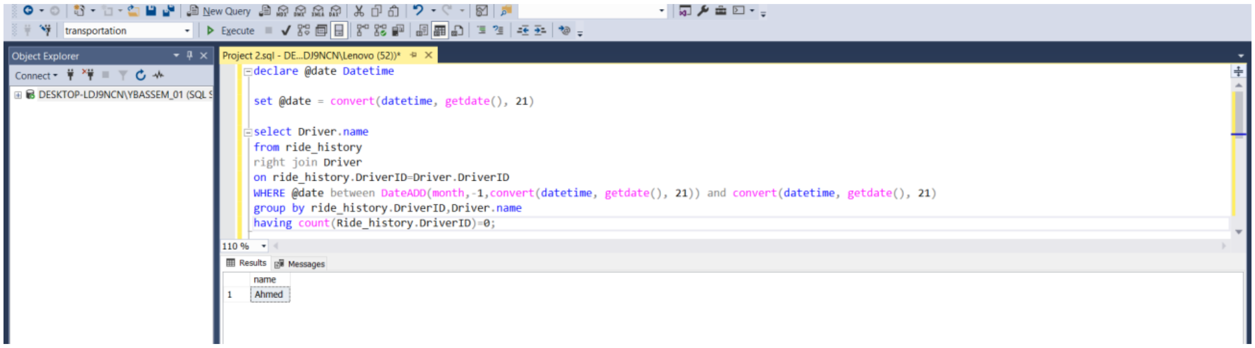
New Query
transportation
Execute
Object Explorer
Connect
DESKTOP-LDJ9NCN\YBASSEM_01 (SQL S
Project 2.sql - DE...DJ9NCN\Lenovo (51))*
110 %
Results
Messages

```
select Driver.name,Ride_rating.rate
      From Driver
      join Ride_rating
      on Ride_rating.DriverID=Driver.DriverID
      where Ride_rating.rate>=4.5
            group by Ride_rating.rate,Driver.name;
```

	name	rate
1	Mostafa	5

Query 5:

```
declare @dateee Datetime

set @dateee = convert(datetime, getdate(), 21)

select Driver.name
from ride_history
right join Driver
on ride_history.DriverID=Driver.DriverID
WHERE @dateee between DateADD(month,-1,convert(datetime, getdate(), 21)) and
convert(datetime, getdate(), 21)
group by ride_history.DriverID,Driver.name
having count(Ride_history.DriverID)=0;
```



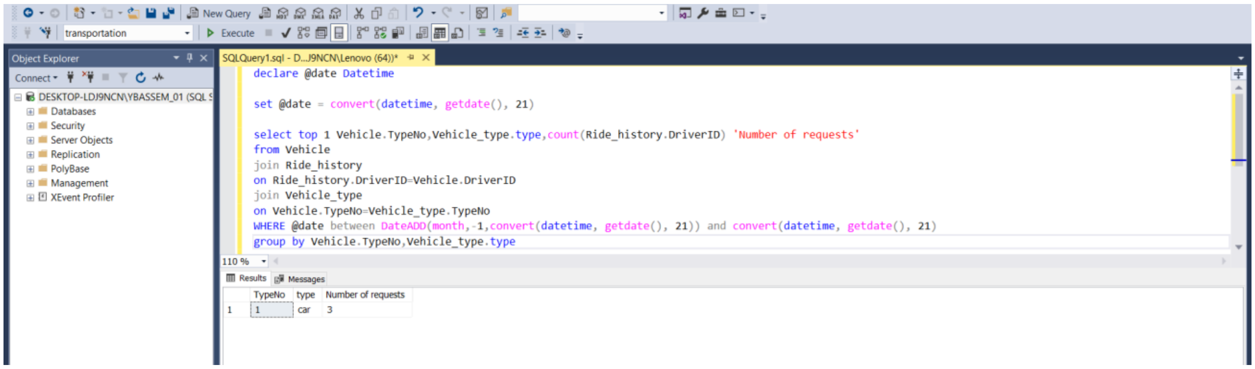
New Query
transportation
Execute
Object Explorer
Connect
DESKTOP-LDJ9NCN\YBASSEM_01 (SQL S
Project 2.sql - DE...DJ9NCN\Lenovo (52))*
110 %
Results
Messages

```
declare @date Datetime

set @date = convert(datetime, getdate(), 21)

select Driver.name
from ride_history
right join Driver
on ride_history.DriverID=Driver.DriverID
WHERE @date between DateADD(month,-1,convert(datetime, getdate(), 21)) and convert(datetime, getdate(), 21)
group by ride_history.DriverID,Driver.name
having count(Ride_history.DriverID)=0;
```

	name
1	Ahmed

Query 6:

```
declare @dat Datetime

set @dat = convert(datetime, getdate(), 21)

select top 1 Vehicle.TypeNo,Vehicle_type.type,count(Trip_details.DriverID) 'Number of
requests'
from Vehicle
join trip_details
on trip_details.DriverID=Vehicle.DriverID
join Vehicle_type
on Vehicle.TypeNo=Vehicle_type.TypeNo
WHERE @dat between DateADD(month,-1,convert(datetime, getdate(), 21)) and
convert(datetime, getdate(), 21)
group by Vehicle.TypeNo,Vehicle_type.type;
```



```
declare @date Datetime

set @date = convert(datetime, getdate(), 21)

select top 1 Vehicle.TypeNo,Vehicle_type.type,count(Ride_history.DriverID) 'Number of requests'
from Vehicle
join Ride_history
on Ride_history.DriverID=Vehicle.DriverID
join Vehicle_type
on Vehicle.TypeNo=Vehicle_type.TypeNo
WHERE @date between DateADD(month,-1,convert(datetime, getdate(), 21)) and convert(datetime, getdate(), 21)
group by Vehicle.TypeNo,Vehicle_type.type
```

	TypeNo	type	Number of requests
1	1	car	3