

American International University - Bangladesh

Project Name: Car Ride Hailing Management System

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Course Name: Introduction to Database

Section: L

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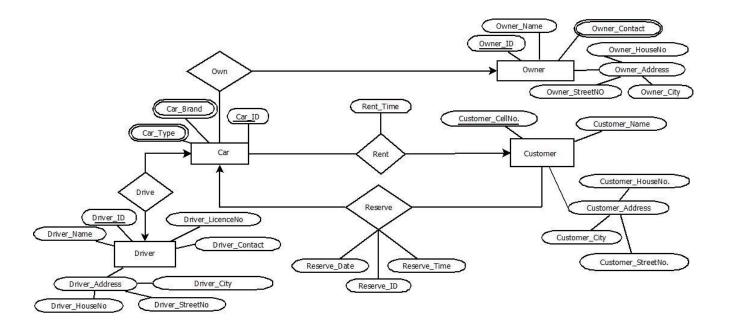
Introduction

The project entitled as "CAR RIDE HAILING MANAGEMENT SYSTEM" is mainly developed for the overall management of the 'Car Ride Hailing'. The project is helpful to manage all the information of Owners, Cars, Drivers and Customers. In our Database System We can add customer information as well as drivers and cars also. The database is also helpful for store the information of the different types of Cars for reservation. Customer can also rent a car. This application is created for easy and quick processing to find a car, driver details and customer details. Anyone can easily use our system. We can find which driver or which car was involved with reservation or renting.

Scenario Description

In a car ride hailing management system a customer may rent many cars. One car may be rented by exactly one customer. A customer is identified by a Customer cell number. The system also stores customer name, address. A customer address is composed of house number, street number and city. A car is identified by car id. Car brand and car type are also stored. There may be multiple brand and type of a car. While renting, the time of the renting of the car is stored. A customer may also reserve a car. A car can be reserved by many customers. To find the priority of the reservation the reserve id, reserve date, reserve time are also stored. A car is owned by at least one owner. An owner may own many cars but the system stores information of those owners of who has owned at least one car stored in the system. To identify an owner, the system stores owner id. It also stores owner name, contact and address. An owner address is composed of house number, street number and city. A driver may drive a car. A driver is identified by driver id. The system also stores driver name, contact, license number and address. A driver address is composed of house number, street number and city.

ER Diagram



Normalization

Rent:

UNF

Rent (<u>Car ID</u>, Car_Brand, Car_Type, <u>Customer CellNo</u>., Customer_Name, Customer_HouseNo, Customer_StreetNo, Customer_City, Rent_Time)

1NF

Car_Brand, Car_Type are multivalued attributes.

1. <u>Car_ID</u>, Car_Brand, Car_Type, <u>Customer_CellNo</u>., Customer_Name, Customer_HouseNo, Customer_StreetNo, Customer_City, Rent_Time

2NF

- 1. Car_ID, Car_Brand, Car_Type
- 2. Customer_CellNo., Customer_Name, Customer_HouseNo, Customer_StreetNo, Customer_City
- 3. Rent Time

3NF

- 1. Car_ID, Car_Brand, Car_Type,
- 2. Customer_CellNo., Customer_Name
- 3. Customer_HouseNo, Customer_StreetNo, Customer_City
- 4. Rent_Time

Table Creation

- 1. Car_ID, Car_Brand1, Car_Brand2, Car_Brand3, Car_Type1, Car_Type2, Car_Type3, Customer_CellNo.
- 2. <u>Customer CellNo.</u>, Customer_Name, CustomerAdd_ID,
- 3. CustomerAdd_ID, Customer_HouseNo, Customer_StreetNo, Customer_City
- 4. Car_ID, Customer_CellNo., Rent_Time

Own:

UNF:

Own (Car_ID, Car_Brand, Car_Type, Owner_ID, Owner_name, Owner_Contact, Owner_HouseNo, Owner_StreetNo, Owner_City)

1NF

Car_Brand, Car_Type, Owner_contact are multivalued attributes.

1. Car_ID, Car_Brand, Car_Type, Owner_ID, Owner_name, Owner_Contact, Owner_HouseNo, Owner_StreetNo, Owner_City

2NF

- 1. Car ID, Car Brand, Car Type
- 2. Owner_ID, Owner_name, Owner_Contact, Owner_HouseNo, Owner_StreetNo, Owner_City

3NF

- 1. Car_ID, Car_Brand, Car_Type
- 2. Owner_ID, Owner_name, Owner_Contact
- 3. Owner_HouseNo, Owner_StreetNo, Owner_City

Table Creation

- 1. Car_ID, Car_Brand1, Car_Brand2, Car_Brand3, Car_Type1, Car_Type2, Car_Type3, Owner_ID
- 2. Owner_ID, Owner_name, Owner_Contact, OwnerAdd_ID
- 3. Owner Add ID, Owner HouseNo, Owner StreetNo, Owner City

Reserve:

UNF

Reserve (Car_ID, Car_Brand, Car_Type, Customer_CellNo., Customer_Name, Customer_HouseNo, Customer_StreetNo, Customer_City, Reserve_date, Reserve_ID, Reserve_Time)

1NF

Car_Brand, Car_Type are multivalued attributes.

1. Car_ID, Car_Brand, Car_Type, Customer_CellNo., Customer_Name, Customer_HouseNo, Customer_StreetNo, Customer_City, Rent_Time

2NF

- 1. Car_ID, Car_Brand, Car_Type
- 2. Customer CellNo., Customer Name, Customer HouseNo, Customer StreetNo, Customer City
- 3. Reserve_date, Reserve_ID, Reserve_Time

3NF

- 1. Car_ID, Car_Brand, Car_Type,
- 2. Customer_CellNo., Customer_Name, Customer_HouseNo, Customer_StreetNo, Customer_City
- 3. Reserve_date, Reserve_ID, Reserve_Time

Table Creation

- 1. Car_ID, Car_Brand1, Car_Brand2, Car_Brand3, Car_Type1, Car_Type2, Car_Type3, Customer_CellNo.
- 2. Customer_CellNo., Customer_Name, CustomerAdd_ID
- 3. Customer Add_ID, Customer HouseNo, Customer StreetNo, Customer City
- 4. Car_ID, Customer_CellNo., Reserve_date, Reserve_ID, Reserve_Time

Drive:

UNF

Drive (Car_ID, Car_Brand, Car_Type, Driver_ID, Driver_LicenseNo, Driver_Name, Driver_Contact, Driver HouseNo, Driver StreetNo, Driver City)

1NF

Car_Brand, Car_Type are multi valued attribute.

Car_ID, Car_Brand, Car_Type, Driver_ID, Driver_LicenseNo, Driver_Name, Driver_Contact, Driver_HouseNo, Driver_StreetNo, Driver_City

2NF

- 1. Car_ID, Car_Brand, Car_Type
- 2. Driver_ID, Driver_LicenseNo, Driver_Name, Driver_Contact, Driver_HouseNo, Driver_StreetNo, Driver_City

<u>3NF</u>

- 1. Car_ID, Car_Brand, Car_Type,
- 2. Driver_ID, Driver_LicenseNo, Driver_Name, Driver_Contact
- 3. Driver_HouseNo, Driver_StreetNo, Driver_City

Table Creation

- 1. Car_ID, Car_Brand1, Car_Brand2, Car_Brand3, Car_Type1, Car_Type2, Car_Type3, Driver_ID.
- 2. Driver_ID, Driver_LicenseNo, Driver_Name, Driver_Contact, DriverAdd_ID
- 3. DriverAdd_ID, Driver_HouseNo, Driver_StreetNo, Driver_City

Temporary Tables

- 1. Car ID, Car_Brand1, Car_Brand2, Car_Brand3, Car_Type1, Car_Type2, Car_Type3, Customer_CellNo.
- 2. Customer_CellNo., Customer_Name, CustomerAdd_ID
- 3. <u>CustomerAdd_ID</u>, Customer_HouseNo, Customer_StreetNo, Customer_City
- 4. Car ID, Customer CellNo., Rent_Time
- 5. Car_ID, Car_Brand1, Car_Brand2, Car_Brand3, Car_Type1, Car_Type2, Car_Type3, Owner_ID
- 6. Owner_ID, Owner_name, Owner_Contact, OwnerAdd_ID
- 7. Owner_Add_ID, Owner_HouseNo, Owner_StreetNo, Owner_City
- 8. Car_ID, Car_Brand1, Car_Brand2, Car_Brand3, Car_Type1, Car_Type2, Car_Type3, Customer_CellNo.
- 9. Customer_CellNo., Customer_Name, CustomerAdd_ID
- 10. <u>CustomerAdd_ID</u>, <u>Customer_HouseNo</u>, <u>Customer_StreetNo</u>, <u>Customer_City</u>
- 11. Car_ID, Customer_CellNo., Reserve_date, Reserve_ID, Reserve_Time
- 12. Car_ID, Car_Brand1, Car_Brand2, Car_Brand3, Car_Type1, Car_Type2, Car_Type3, Driver_ID.
- 13. <u>Driver_ID</u>, Driver_LicenseNo, Driver_Name, Driver_Contact, **DriverAdd_ID**
- 14. <u>DriverAdd_ID</u>, Driver_HouseNo, Driver_StreetNo, Driver_City

Final Tables

- 1. <u>Car_ID</u>, Car_Brand1, Car_Brand2, Car_Brand3, Car_Type1, Car_Type2, Car_Type3, Customer_CellNo., Owner_ID, Driver_ID.
- 2. CustomerAdd_ID, Customer_HouseNo, Customer_StreetNo, Customer_City
- 3. Car_ID, Customer_CellNo., Rent_Time
- 4. Owner_ID, Owner_name, Owner_Contact, OwnerAdd_ID
- 5. Owner_Add ID, Owner_HouseNo, Owner_StreetNo, Owner_City
- 6. Customer_CellNo., Customer_Name, CustomerAdd_ID
- 7. Car_ID, Customer_CellNo., Reserve_date, Reserve_ID, Reserve_Time
- 8. <u>Driver_ID</u>, Driver_LicenseNo, Driver_Name, Driver_Contact, **DriverAdd_ID**
- 9. <u>DriverAdd_ID</u>, Driver_HouseNo, Driver_StreetNo, Driver_City

Schema Diagram

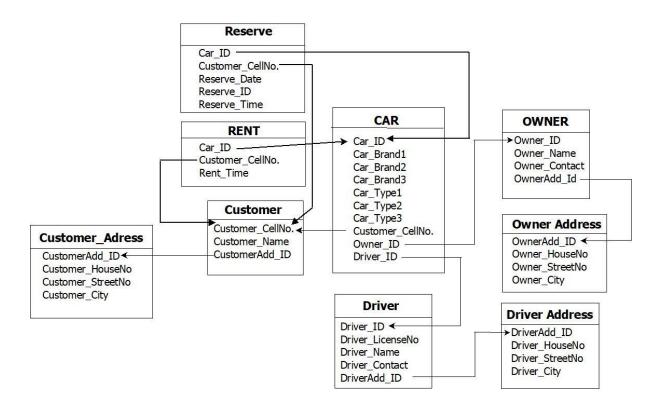
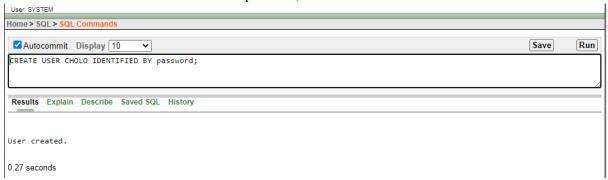
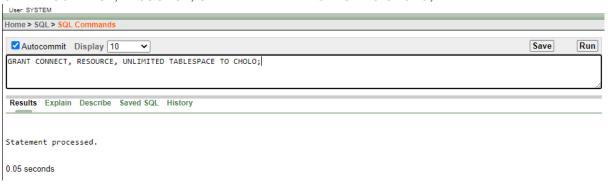


Table Creation

1. CREATE USER CHOLO IDENTIFIED BY password;



2. GRANT CONNECT, RESOURCE, UNLIMITED TABLESPACE TO CHOLO;

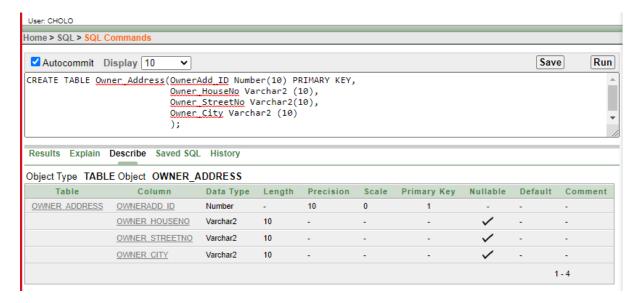


3. CREATE ROLE Owner;



After Login into User ID CHOLO

4. CREATE TABLE Owner_Address(OwnerAdd_ID Number(10) PRIMARY KEY,
Owner_HouseNo Varchar2 (10),
Owner_StreetNo Varchar2(10),
Owner_City Varchar2 (10)
);



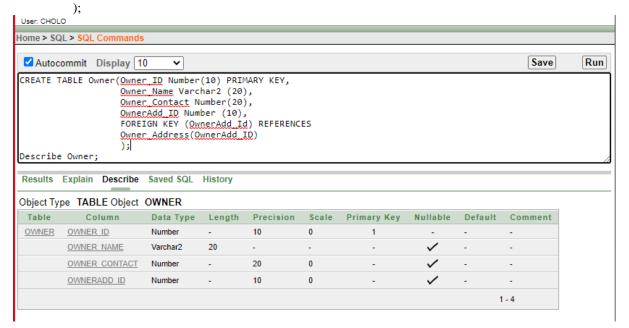
5. CREATE TABLE Owner(Owner_ID Number(10) PRIMARY KEY,

Owner_Name Varchar2 (20),

Owner_Contact Number(20),

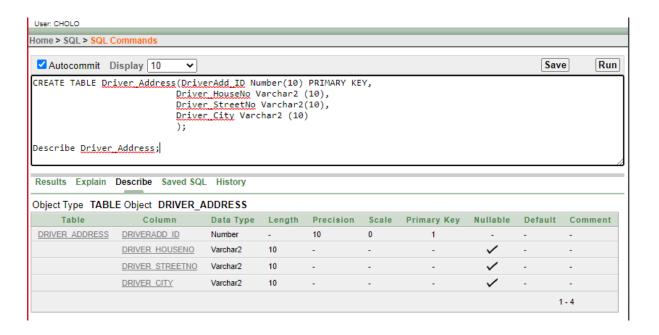
OwnerAdd_ID Number (10), FOREIGN KEY (OwnerAdd Id) REFERENCES

Owner_Address(OwnerAdd_ID)



6. CREATE TABLE Driver_Address(DriverAdd_ID Number(10) PRIMARY KEY,

Driver_HouseNo Varchar2 (10), Driver_StreetNo Varchar2(10), Driver_City Varchar2 (10));



7. CREATE TABLE Driver(Driver_ID Number(10) PRIMARY KEY,

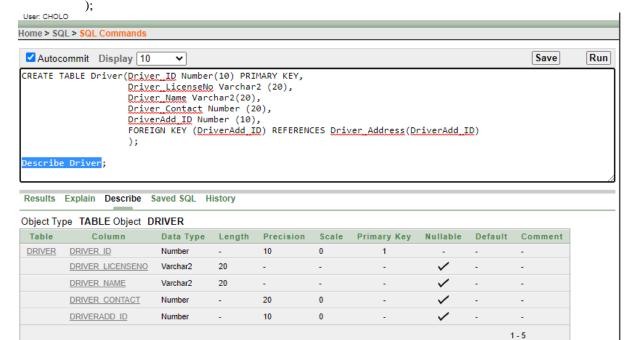
Driver_LicenseNo Varchar2 (20),

Driver_Name Varchar2(20),

Driver_Contact Number (20),

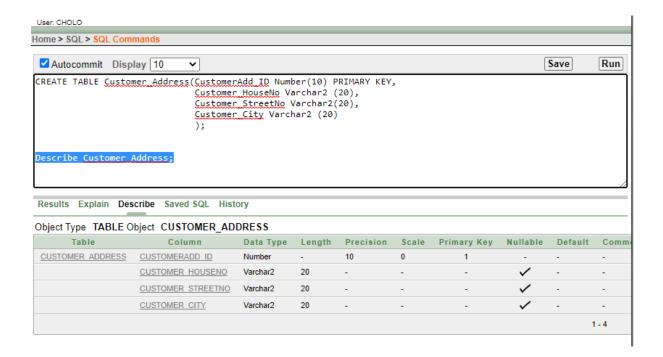
DriverAdd_ID Number (10),

 $FOREIGN\ KEY\ (DriverAdd_ID)\ REFERENCES\ Driver_Address(DriverAdd_ID)$



8. CREATE TABLE Customer_Address(CustomerAdd_ID Number(10) PRIMARY KEY,

Customer_HouseNo Varchar2 (20), Customer_StreetNo Varchar2(20), Customer_City Varchar2 (20));



9. CREATE TABLE Customer (Customer_CellNo Number(20) PRIMARY KEY,

Customer Name Varchar2 (20), CustomerAdd ID Number(10),

FOREIGN KEY (CustomerAdd ID) REFERENCES

Customer_Address(CustomerAdd_ID)

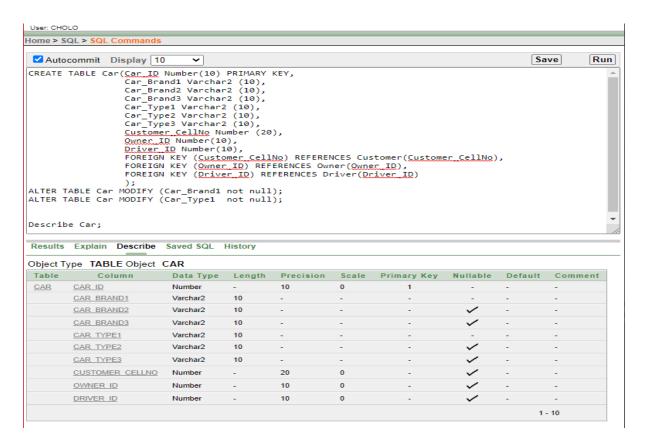
User: CHOLO Home > SQL > SQL Commands ✓ Autocommit Display 10 Save Run CREATE TABLE Customer(Customer CellNo Number(20) PRIMARY KEY, Customer Name Varchar2 (20), CustomerAdd ID Number(10), FOREIGN KEY (CustomerAdd ID) REFERENCES Customer Address(CustomerAdd ID) Describe Customer; Results Explain Describe Saved SQL History Object Type TABLE Object CUSTOMER Column Data Type Length Precision Nullable 20 CUSTOMER CELLNO Number CUSTOMER NAME Varchar2 CUSTOMERADD ID Number 10 1-3

10. CREATE TABLE Car(Car_ID Number(10) PRIMARY KEY,

```
Car_Brand1 Varchar2 (10),
Car Brand2 Varchar2 (10),
Car Brand3 Varchar2 (10),
Car_Type1 Varchar2 (10),
Car_Type2 Varchar2 (10),
Car_Type3 Varchar2 (10),
Customer_CellNo Number (20),
Owner_ID Number(10),
Driver_ID Number(10),
FOREIGN KEY (Customer_CellNo) REFERENCES Customer(Customer_CellNo),
FOREIGN KEY (Owner_ID) REFERENCES Owner(Owner_ID),
FOREIGN KEY (Driver_ID) REFERENCES Driver(Driver_ID)
);
```

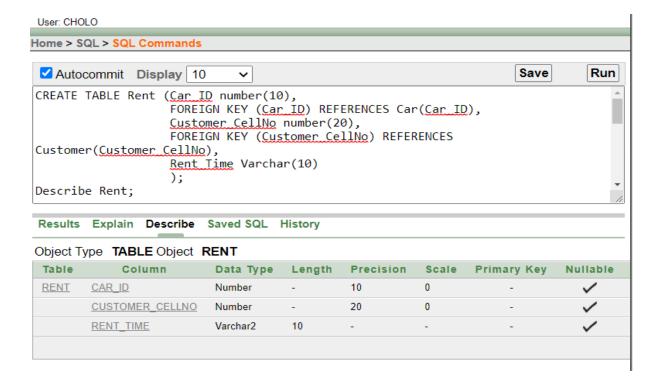
ALTER TABLE Car MODIFY (Car_Brand1 not null);

ALTER TABLE Car MODIFY (Car_Type1 not null);



11. CREATE TABLE Rent (Car_ID number(10),

FOREIGN KEY (Car_ID) REFERENCES Car(Car_ID),
Customer_CellNo number(20),
FOREIGN KEY (Customer_CellNo) REFERENCES Customer(Customer_CellNo),
Rent_Time Varchar(10)
);



12. CREATE TABLE Reserve (Car ID Number(10), FOREIGN KEY (Car_ID) REFERENCES Car(Car_ID), Customer_CellNo Number(20), FOREIGN KEY (Customer_CellNo) REFERENCES Customer(Customer_CellNo), Reserve_Date Date, Reserve_ID Number(10), Reserve_Time varchar(10) User: CHOLO Home > SQL > SQL Commands Save Run ✓ Autocommit Display 10 V CREATE TABLE Reserve (Car ID Number(10), FOREIGN KEY (Car ID) REFERENCES Car(Car ID), Customer CellNo Number(20), FOREIGN KEY (Customer CellNo) REFERENCES Customer(Customer CellNo), Reserve Date Date, Reserve ID Number(10), Reserve Time varchar(10)); Describe Rent; Explain Describe Saved SQL Results History Object Type TABLE Object RENT Table Column Primary Key Nullable Data Type Length Precision Scale 0 **RENT** CAR_ID 10 Number CUSTOMER_CELLNO Number 20 0 RENT_TIME Varchar2 10

Create Sequence

1. CREATE SEQUENCE Owner_Owner_ID

INCREMENT BY 1 START WITH 1 MAXVALUE 500 NOCACHE NOCYCLE;

2. CREATE SEQUENCE Owner_Address_OwnerAdd_ID

INCREMENT BY 1 START WITH 1 MAXVALUE 500 NOCACHE NOCYCLE;

3. CREATE SEQUENCE Driver_Driver_ID

INCREMENT BY 1 START WITH 1 MAXVALUE 500 NOCACHE NOCYCLE;

4. CREATE SEQUENCE Driver_DriverAdd_ID

INCREMENT BY 1 START WITH 1 MAXVALUE 600 NOCACHE NOCYCLE;

5. CREATE SEQUENCE Car_Car_ID

INCREMENT BY 1 START WITH 1 MAXVALUE 1000 NOCACHE NOCYCLE;

Data Insertion

1. Owner_Address

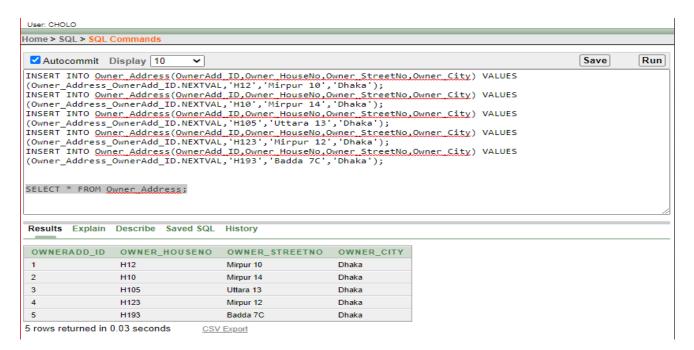
INSERT INTO Owner_Address(OwnerAdd_ID,Owner_HouseNo,Owner_StreetNo,Owner_City) VALUES (Owner_Address_OwnerAdd_ID.NEXTVAL,'H12','Mirpur 10','Dhaka');

INSERT INTO Owner_Address(OwnerAdd_ID,Owner_HouseNo,Owner_StreetNo,Owner_City) VALUES (Owner_Address_OwnerAdd_ID.NEXTVAL,'H10','Mirpur 14','Dhaka');

INSERT INTO Owner_Address(OwnerAdd_ID,Owner_HouseNo,Owner_StreetNo,Owner_City) VALUES (Owner_Address_OwnerAdd_ID.NEXTVAL,'H105','Uttara 13','Dhaka');

INSERT INTO Owner_Address(OwnerAdd_ID,Owner_HouseNo,Owner_StreetNo,Owner_City) VALUES (Owner_Address_OwnerAdd_ID.NEXTVAL,'H123','Mirpur 12','Dhaka');

INSERT INTO Owner_Address(OwnerAdd_ID,Owner_HouseNo,Owner_StreetNo,Owner_City) VALUES (Owner_Address_OwnerAdd_ID.NEXTVAL,'H193','Badda 7C','Dhaka');



2. Owner

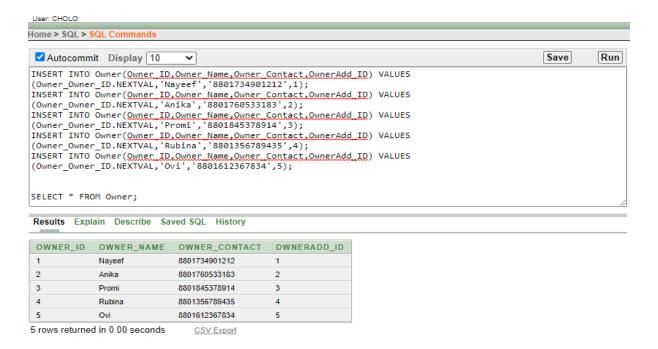
INSERT INTO Owner(Owner_ID,Owner_Name,Owner_Contact,OwnerAdd_ID) VALUES (Owner Owner ID.NEXTVAL,'Naveef,'8801734901212',1);

INSERT INTO Owner(Owner_ID,Owner_Name,Owner_Contact,OwnerAdd_ID) VALUES (Owner_Owner_ID.NEXTVAL,'Anika','8801760533183',2);

INSERT INTO Owner(Owner_ID,Owner_Name,Owner_Contact,OwnerAdd_ID) VALUES (Owner_Owner_ID.NEXTVAL,'Promi','8801845378914',3);

INSERT INTO Owner(Owner_ID,Owner_Name,Owner_Contact,OwnerAdd_ID) VALUES (Owner_Owner_ID.NEXTVAL,'Rubina','8801356789435',4);

INSERT INTO Owner(Owner_ID,Owner_Name,Owner_Contact,OwnerAdd_ID) VALUES (Owner_Owner_ID.NEXTVAL,'Ovi','8801612367834',5);



3. Driver_Address

INSERT INTO Driver_Address(DriverAdd_ID, Driver_HouseNo, Driver_StreetNo, Driver_City) VALUES (Driver_DriverAdd_ID.NEXTVAL,'H#33','Mirpur 1','Dhaka');

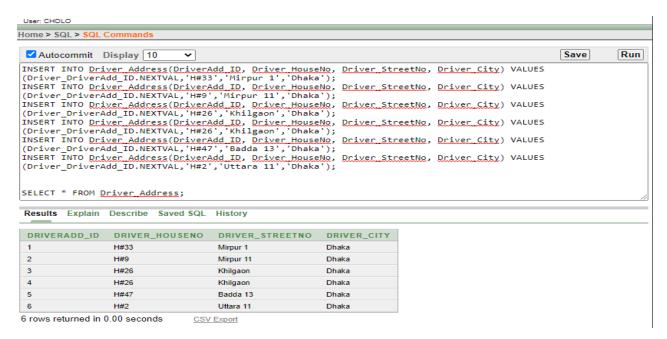
INSERT INTO Driver_Address(DriverAdd_ID, Driver_HouseNo, Driver_StreetNo, Driver_City) VALUES (Driver_DriverAdd_ID.NEXTVAL,'H#9','Mirpur 11','Dhaka');

INSERT INTO Driver_Address(DriverAdd_ID, Driver_HouseNo, Driver_StreetNo, Driver_City) VALUES (Driver_DriverAdd_ID.NEXTVAL,'H#26','Khilgaon','Dhaka');

INSERT INTO Driver_Address(DriverAdd_ID, Driver_HouseNo, Driver_StreetNo, Driver_City) VALUES (Driver DriverAdd ID.NEXTVAL,'H#26','Khilgaon','Dhaka');

INSERT INTO Driver_Address(DriverAdd_ID, Driver_HouseNo, Driver_StreetNo, Driver_City) VALUES (Driver_DriverAdd_ID.NEXTVAL,'H#47','Badda 13','Dhaka');

INSERT INTO Driver_Address(DriverAdd_ID, Driver_HouseNo, Driver_StreetNo, Driver_City) VALUES (Driver_DriverAdd_ID.NEXTVAL,'H#2','Uttara 11','Dhaka');



4. Driver

INSERT INTO Driver(Driver_ID, Driver_LicenseNo, Driver_Name, Driver_Contact, DriverAdd_ID) VALUES (Driver_Driver_ID.NEXTVAL, 'N167T895', 'Abdur Rahim', '8801690685435', 1);

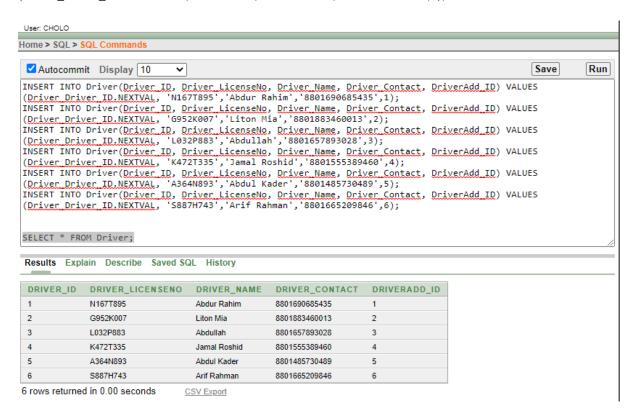
INSERT INTO Driver(Driver_ID, Driver_LicenseNo, Driver_Name, Driver_Contact, DriverAdd_ID) VALUES (Driver_Driver_ID.NEXTVAL, 'G952K007', 'Liton Mia', '8801883460013', 2);

INSERT INTO Driver(Driver_ID, Driver_LicenseNo, Driver_Name, Driver_Contact, DriverAdd_ID) VALUES (Driver_Driver_ID.NEXTVAL, 'L032P883', 'Abdullah', '8801657893028', 3);

INSERT INTO Driver(Driver_ID, Driver_LicenseNo, Driver_Name, Driver_Contact, DriverAdd_ID) VALUES (Driver_Driver_ID.NEXTVAL, 'K472T335', 'Jamal Roshid', '8801555389460', 4);

INSERT INTO Driver(Driver_ID, Driver_LicenseNo, Driver_Name, Driver_Contact, DriverAdd_ID) VALUES (Driver_Driver_ID.NEXTVAL, 'A364N893', 'Abdul Kader', '8801485730489', 5);

INSERT INTO Driver(Driver_ID, Driver_LicenseNo, Driver_Name, Driver_Contact, DriverAdd_ID) VALUES (Driver_Driver_ID.NEXTVAL, 'S887H743','Arif Rahman','8801665209846',6);



5. Customer_Address

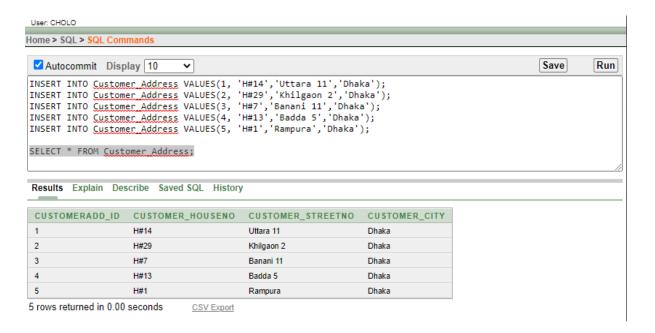
INSERT INTO Customer_Address VALUES(1, 'H#14', 'Uttara 11', 'Dhaka');

INSERT INTO Customer_Address VALUES(2, 'H#29', 'Khilgaon 2', 'Dhaka');

INSERT INTO Customer_Address VALUES(3, 'H#7', 'Banani 11', 'Dhaka');

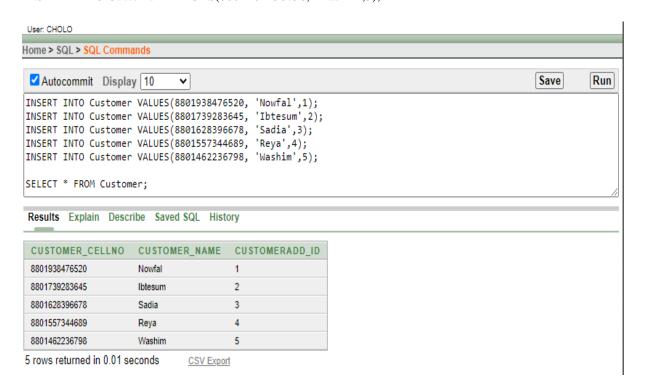
INSERT INTO Customer_Address VALUES(4, 'H#13', 'Badda 5', 'Dhaka');

INSERT INTO Customer_Address VALUES(5, 'H#1', 'Rampura', 'Dhaka');



6. Customer

INSERT INTO Customer VALUES(8801938476520, 'Nowfal',1); INSERT INTO Customer VALUES(8801739283645, 'Ibtesum',2); INSERT INTO Customer VALUES(8801628396678, 'Sadia',3); INSERT INTO Customer VALUES(8801557344689, 'Reya',4); INSERT INTO Customer VALUES(8801462236798, 'Washim',5);



7. Car

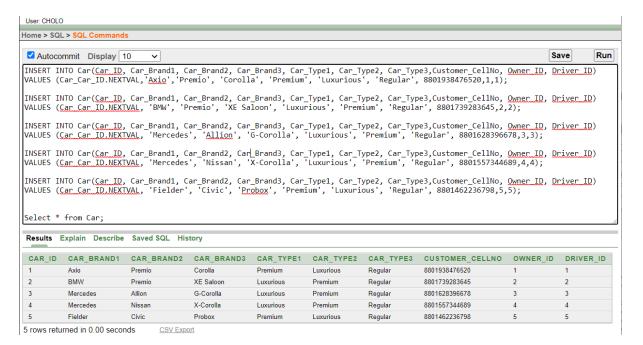
INSERT INTO Car(Car_ID, Car_Brand1, Car_Brand2, Car_Brand3, Car_Type1, Car_Type2, Car_Type3,Customer_CellNo, Owner_ID, Driver_ID) VALUES (Car_Car_ID.NEXTVAL,'Axio','Premio', 'Corolla', 'Premium', 'Luxurious', 'Regular', 8801938476520,1,1);

INSERT INTO Car(Car_ID, Car_Brand1, Car_Brand2, Car_Brand3, Car_Type1, Car_Type2, Car_Type3,Customer_CellNo, Owner_ID, Driver_ID) VALUES (Car_Car_ID.NEXTVAL, 'BMW', 'Premio', 'XE Saloon', 'Luxurious', 'Premium', 'Regular', 8801739283645,2,2);

INSERT INTO Car(Car_ID, Car_Brand1, Car_Brand2, Car_Brand3, Car_Type1, Car_Type2, Car_Type3,Customer_CellNo, Owner_ID, Driver_ID) VALUES (Car_Car_ID.NEXTVAL, 'Mercedes', 'Allion', 'G-Corolla', 'Luxurious', 'Premium', 'Regular', 8801628396678,3,3);

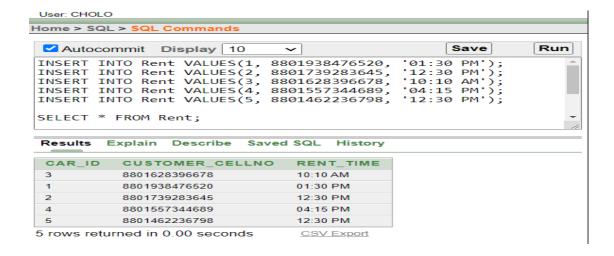
INSERT INTO Car(Car_ID, Car_Brand1, Car_Brand2, Car_Brand3, Car_Type1, Car_Type2, Car_Type3,Customer_CellNo, Owner_ID, Driver_ID) VALUES (Car_Car_ID.NEXTVAL, 'Mercedes', 'Nissan', 'X-Corolla', 'Luxurious', 'Premium', 'Regular', 8801557344689,4,4);

INSERT INTO Car(Car_ID, Car_Brand1, Car_Brand2, Car_Brand3, Car_Type1, Car_Type2, Car_Type3,Customer_CellNo, Owner_ID, Driver_ID) VALUES (Car_Car_ID.NEXTVAL, 'Fielder', 'Civic', 'Probox', 'Premium', 'Luxurious', 'Regular', 8801462236798,5,5);



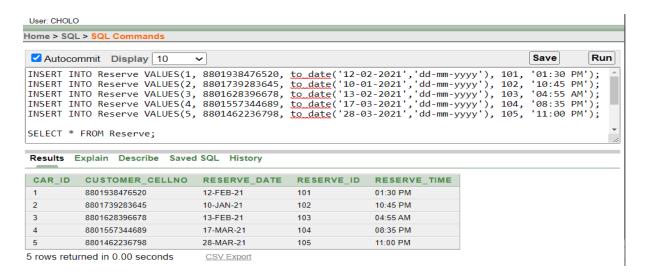
8. Rent

INSERT INTO Rent VALUES(1, 8801938476520, '01:30 PM'); INSERT INTO Rent VALUES(2, 8801739283645, '12:30 PM'); INSERT INTO Rent VALUES(3, 8801628396678, '10:10 AM'); INSERT INTO Rent VALUES(4, 8801557344689, '04:15 PM'); INSERT INTO Rent VALUES(5, 8801462236798, '12:30 PM');



9. Reserve

INSERT INTO Reserve VALUES(1, 8801938476520, to_date('12-02-2021','dd-mm-yyyy'), 101, '01:30 PM'); INSERT INTO Reserve VALUES(2, 8801739283645, to_date('10-01-2021','dd-mm-yyyy'), 102, '10:45 PM'); INSERT INTO Reserve VALUES(3, 8801628396678, to_date('13-02-2021','dd-mm-yyyy'), 103, '04:55 AM'); INSERT INTO Reserve VALUES(4, 8801557344689, to_date('17-03-2021','dd-mm-yyyy'), 104, '08:35 PM'); INSERT INTO Reserve VALUES(5, 8801462236798, to_date('28-03-2021','dd-mm-yyyy'), 105, '11:00 PM');

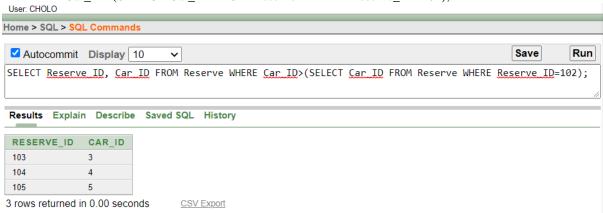


Query Writing

Subquery:

1. Display those Car ID and Reserve ID where Reserve ID is greater than 102

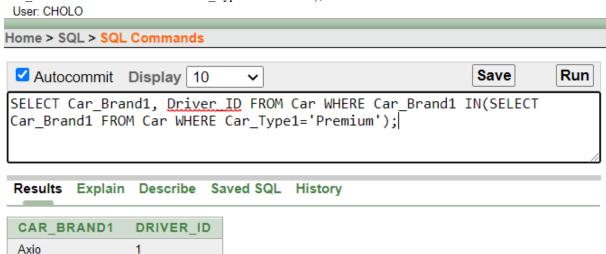
Ans: SELECT Reserve_ID, Car_ID FROM Reserve WHERE Car_ID>(SELECT Car_ID FROM Reserve WHERE Reserve_ID=102);



2. Display the Car Brand1 and the Driver ID where Car Type1 is premium

Ans: SELECT Car_Brand1, Driver_ID FROM Car WHERE Car_Brand1 IN (SELECT

Car Brand1 FROM Car WHERE Car Type1='Premium');



2 rows returned in 0.01 seconds

Fielder

5

CSV Export

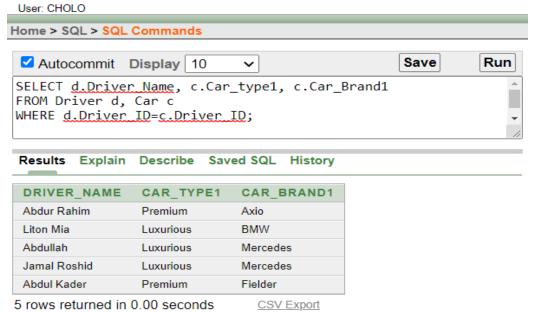
Joining:

1. Write a query to display Driver name, Car Type1 and Car Brand1 for all drivers.

Ans: SELECT d.Driver_Name, c.Car_Type1, c.Car_Brand1

FROM Driver d, Car c

WHERE d.Driver_ID=c.Driver_ID;

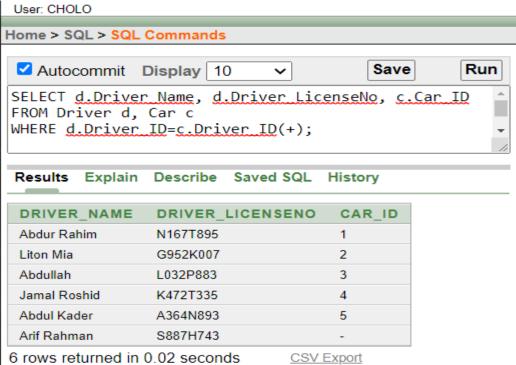


2. Display all the Driver name, Driver LicenseNo and their car ID. Make sure that the drivers that is not assigned with a car are also displayed.

Ans: SELECT d.Driver_Name, d.Driver_LicenseNo, c.Car_ID

From Driver d, Car c

WHERE d,Driver_ID=c.Driver_ID(+);



View:

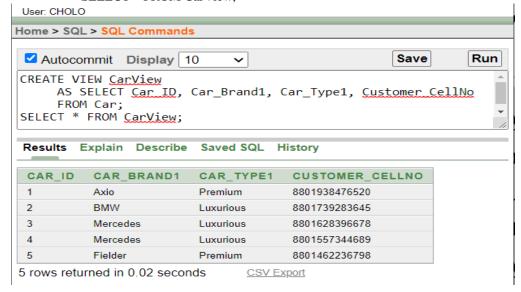
Grant Create View TO CHOLO; [System]

1. Create a view called CarView based on the Car_ID, Car_Brand1, Car_Type1, Customer_CellNo from Car table. Display the contents of carView.

Ans: CREATE VIEW CarView

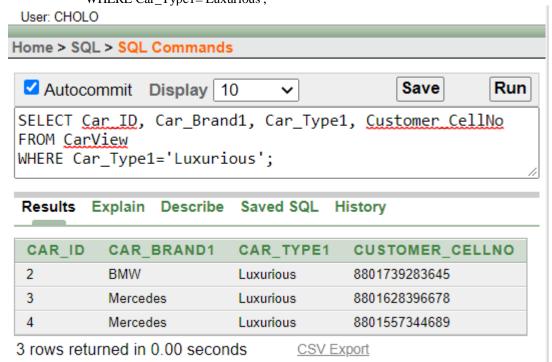
AS SELECT Car_ID, Car_Brand1, Car_Type1, Customer_CellNo FROM Car;

SELECT * FROM CarView;



2. Write a query to display Car ID, Car Brand1, Car Type1 and Customer CellNo where Car Type1 is Luxurious from Car Table.

Ans: SELECT Car_ID, Car_Brand1, Car_Type1, Customer_CellNo FROM CarView
WHERE Car_Type1='Luxurious';



Relational Algebra

- 1. Find the Car ID whose customer CellNo is "8801557344689" from the Car Table $\prod_{\text{Car ID}} (\sigma_{\text{Customer CellNo}} = \text{``8801557344689''})$ (Car))
- 2. Find the driver name and contact whose License NO is "G952K007" from the Driver Table Π_{Driver_Name, Driver_Contact} (σ _{Driver_LicenseNo = "G952K007"} (Driver))
- 3. Find the Customer CellNo who reserved on 12 FEB 2021 from Reserve table $\prod_{\text{Customer_CellNo}} (\sigma_{\text{Reserve_Date} = \text{``12-02-2021''}} (\text{Reserve}))$
- 4. Find the Rent Time whose Car ID is 4 from Rent table $\prod_{\text{Rent_Time}} (\sigma_{\text{Car_ID} = 4} (\text{Rent}))$
- 5. Find the Owner Name and Owner ID whose Contact No is 8801612367834 from Owner Table $\prod_{\text{Owner_Name, Owner_ID}} (\sigma_{\text{Owner_Contact}} = \text{``8801612367834''}) (Owner))$

Conclusion

After the efforts by all our group members we created our database management project "Car Ride Hailing Management System". Initially we faced some problems for example we faced problems doing normalization, creating tables according to the schema and in creating view but finally we were able to overcome those problems efficiently. Hopefully in future we will work to use our database system to work for the whole country not only in Dhaka city. We will also add the fare of the renting of a car it will be better to operate. We have also made a plan to add the salary for the drivers so that it will be easier to sort the drivers according salaries and also experience. Because of insufficient advanced Database knowledge, we couldn't add advance features. We hope in future we will be able to do that.