DataBase-Car Renting System

```sql
CREATE TABLE customer
(
  housenum INT NOT NULL,
  city varchar2(20) NOT NULL,
  country varchar2(20) NOT NULL,
  fname varchar2(20) NOT NULL,
  lname varchar2(20) NOT NULL,
  customer_id INT NOT NULL,
  licence CHAR(1) NOT NULL,
  MailId varchar2(20) NOT NULL,
  creditId INT NOT NULL,
  PRIMARY KEY (customer_id),
  UNIQUE (MailId),
  UNIQUE (creditId)
);
CREATE TABLE admin
(
  fname varchar2(20) NOT NULL,
  lname varchar2(20) NOT NULL,
  phoneNum INT NOT NULL,
  adminId INT NOT NULL,
  PRIMARY KEY (adminId)
);
CREATE TABLE reservation
(
  reserveid INT NOT NULL,
  returnDate DATE NOT NULL,
  reserveDate DATE NOT NULL,
  cancelatin CHAR NOT NULL,
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  pickupDate DATE NOT NULL,

  customer_id INT NOT NULL,

  PRIMARY KEY (reserveid),

  FOREIGN KEY (customer_id) REFERENCES customer(customer_id)

);

CREATE TABLE Rent

(

  RentId INT NOT NULL,

  Dibosite INT NOT NULL,

  PayMethod varchar2(20) NOT NULL,

  Refund INT NOT NULL,

  Damage INT NOT NULL,

  customer_id INT NOT NULL,

  reserveid INT NOT NULL,

  PRIMARY KEY (RentId),

  FOREIGN KEY (customer_id) REFERENCES customer(customer_id),

  FOREIGN KEY (reserveid) REFERENCES reservation(reserveid)

);

CREATE TABLE customer_customerNum

(

  customerNum INT NOT NULL,

  customer_id INT NOT NULL,

  PRIMARY KEY (customerNum, customer_id),

  FOREIGN KEY (customer_id) REFERENCES customer(customer_id)

);

CREATE TABLE Rent_PayDate

(

  PayDate date NOT NULL,

  RentId INT NOT NULL,
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  PRIMARY KEY (PayDate, RentId),

  FOREIGN KEY (RentId) REFERENCES Rent(RentId)

);

CREATE TABLE car

(

  carid INT NOT NULL,

  carName varchar2(20) NOT NULL,

  dailyprice INT NOT NULL,

  RentId INT NOT NULL,

  adminId INT NOT NULL,

  reserveid INT NOT NULL,

  PRIMARY KEY (carid),

  FOREIGN KEY (RentId) REFERENCES Rent(RentId),

  FOREIGN KEY (adminId) REFERENCES admin(adminId),

  FOREIGN KEY (reserveid) REFERENCES reservation(reserveid)

);

CREATE TABLE car_Model

(

  carmodel number NOT NULL,

  carid INT NOT NULL,

  PRIMARY KEY ( carmodel, carid),

  FOREIGN KEY (carid) REFERENCES car(carid)

);

CREATE TABLE car_color

(

  color varchar2(20) NOT NULL,

  carid INT NOT NULL,

  PRIMARY KEY (color, carid),

  FOREIGN KEY (carid) REFERENCES car(carid)
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);
insert into customer values(37,'cairo','egypt','salwa','khairy',1,'y','salwa.com',50);
insert into customer values(38,'giza','egypt','habiba','mohamed',2,'y','habiba.com',52);
insert into customer values(39,'cairo','egypt','rowida','taher',3,'y','rowida.com',55);
insert into customer values(37,'alex','egypt','roaa','mohamed',4,'y','roaa.com',51);
insert into customer values(37,'cairo','egypt','habiba','adel',5,'y','habiba2.com',56);
insert into customer values(37,'cairo','egypt','mariam','khairy',6,'y','mariam.com',54);

insert into admin values('ahmed','mohamed',011567816,1);
insert into admin values('salwa','ahmed',011957864,2);
insert into admin values('mostafa','ali',010235476,3);

insert into reservation values(1,'23-sep-2023','20-sep-2023','n','20-sep-2023',1);
insert into reservation values(2,'15-may-2023','12-sep-2023','n','12-sep-2023',2);
insert into reservation values(3,'17-mar-2023','14-mar-2023','n','14-mar-2023',3);
insert into reservation values(4,'12-sep-2023','9-sep-2023','n','9-sep-2023',4);
insert into reservation values(5,'8-jul-2023','5-jul-2023','n','5-jul-2023',5);
insert into reservation values(6,'20-jan-2023','17-jan-2023','n','17-jan-2023',6);

insert into rent values(1,100,'cach',200,100,1,1);
insert into rent values(2,150,'credit',300,150,2,2);
insert into rent values(3,135,'credit',170,153,3,3);
insert into rent values(4,200,'cach',400,200,4,4);
insert into rent values(5,60,'cach',120,60,5,5);
insert into rent values(6,70,'credit',140,70,6,6);

insert into customer_customernum values(011659895,1);
insert into customer_customernum values(0119994163,2);
insert into customer_customernum values(010897263,3);
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insert into customer_customernum values(01289564,4);

insert into customer_customernum values(0151875214,5);

insert into customer_customernum values(0114634634,6);


insert into rent_paydate values('20-sep-2023',1);

insert into rent_paydate values('12-sep-2023',2);

insert into rent_paydate values('14-mar-2023',3);

insert into rent_paydate values('9-sep-2023',4);

insert into rent_paydate values('5-jul-2023',5);


insert into car values(1,'BM',250,1,1,1);

insert into car values(2,'toyota',200,2,2,2);

insert into car values(3,'honda',150,3,3,1);

insert into car values(4,'kia',250,4,3,3);

insert into car values(5,'marcedes',300,5,2,4);

insert into car values(6,'porsche',250,5,2,4);

insert into car values(9,'kia',400,6,3,5);

insert into car values(10,'BM',250,5,2,4);

insert into car values(11,'porsche',300,5,2,4);

insert into car values(12,'porsche',300,6,4,3);

insert into car values(13,'toyota',300,5,2,4);

insert into car values(14,'marcedes',350,6,2,1);


insert into car_model values(2020,1);

insert into car_model values(2019,2);

insert into car_model values(2023,4);

insert into car_model values(2022,2);


insert into car_color values('black',1);
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insert into car_color values('blue',2);

insert into car_color values('red',4);

insert into car_color values('white',2);

COMMIT;

Stored procedures:

CREATE OR REPLACE

PROCEDURE CARCOLOR (CID OUT SYS_REFCURSOR)

AS

BEGIN

  open cid for

select color from car_color;

end;

create or replace PROCEDURE GerRentId(RID out number)

as

BEGIN

select max(RentId)

into RID

FROM rent;

END;

create or replace PROCEDURE GETCUSTOMERID(RId out number)

AS

BEGIN

 select max(customer_id)

into RID

FROM customer;

END;

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create or replace PROCEDURE GetrReserveId(RID out number)

as

BEGIN

select max(reserveid)

into RID

FROM reservation;

END;


create or replace procedure InsertCustomer

(hnum int, cityy VARCHAR2,countryy varchar2,

fnamee varchar2, lnamee varchar2,cid int,lis CHAR,mid varchar2,crid int)

as

begin


INSERT INTO customer (housenum, city, country, fname, lname, customer_id, licence, mailid, creditid)

  Values ( hnum, cityy, countryy, fnamee, lnamee, cid, lis, mid, crid);


End ;


create or replace PROCEDURE RENTAL (rid int,dib int,pm VARCHAR2,refu int,dm int,cid int,resid int)

AS

BEGIN

INSERT into rent (rentid, dibosite, paymethod, refund, damage, customer_id, reserveid)

values (rid, dib, pm, refu, dm, cid, resid);

END;


create or replace PROCEDURE RESERVE (rid int,rd DATE,resd DATE,can CHAR,pd DATE,cid int)

AS
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BEGIN

 INSERT into reservation (reserveid, returndate, reservedate, cancelatin, pickupdate, customer_id)

 values (rid, rd, resd, can, pd, cid);

END ;


create or replace procedure view_cars (CID out sys_refcursor)

as BEGIN

open cid for

select * from car;

end;


create or replace PROCEDURE view_cars_sorted (CID OUT SYS_REFCURSOR)

AS

BEGIN

  OPEN CID FOR

    SELECT *

    FROM car

    ORDER BY dailyprice ASC;

END;
```