

**AMERICAN INTERNATIONAL UNIVERSITY**

**BANGLADESH**

COURSE: Introduction To Database

Section : F

**Project Name: Food Delivery & Management System**

GROUP NAME: UNITED CODERS

**Group Member             -           Id**

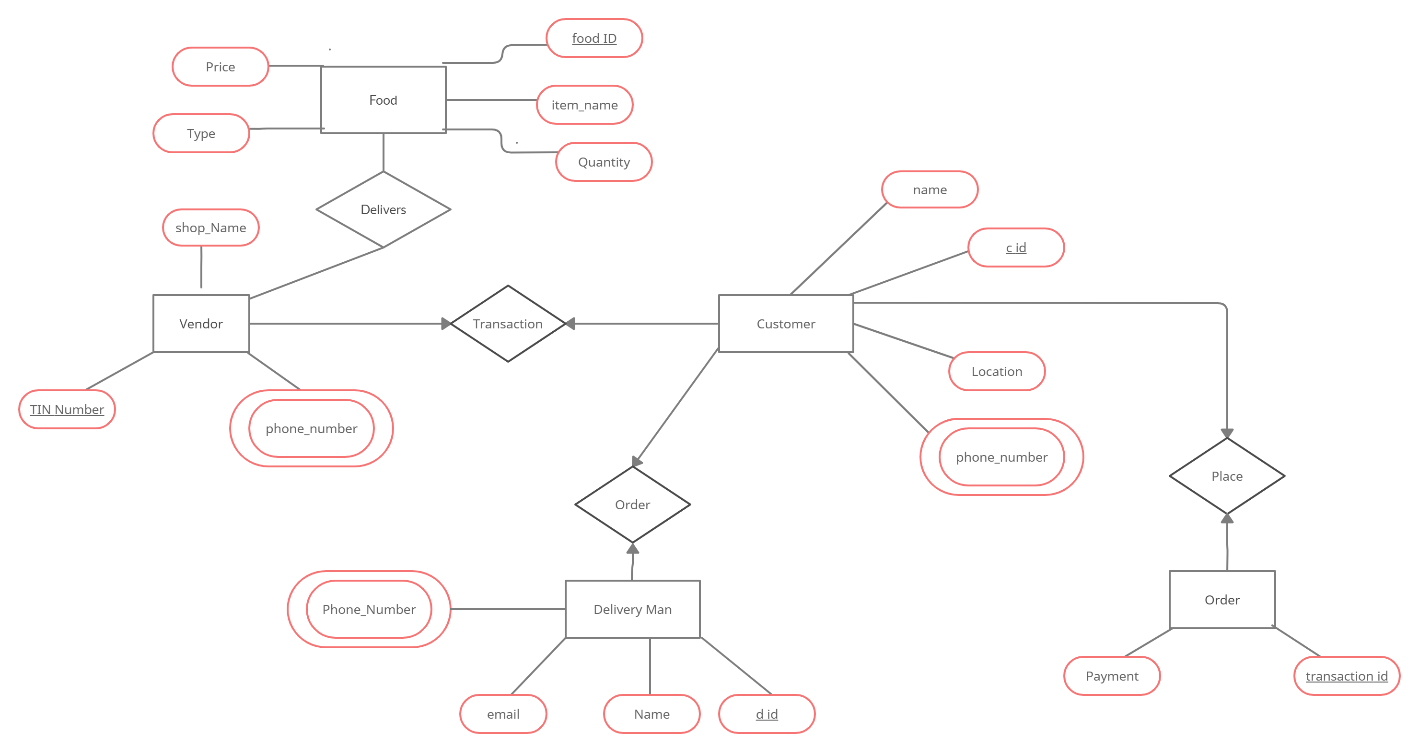
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**Case Study**

In a food delivery management system, the customer places their order staying at home or anywhere and the vendors hire a delivery man who delivers the food to the customer addresses. A customer order food by food\_name, price, type,quantity and item\_name. After receiving the order customer pays bill. one customer can order many food items also a deliveryman can deliver to many customers. Both the customer and the delivery man is identified by their name, email and address. The system holds the basic information for both the Customer and Vendor; such as name, phone number, location etc. So the relationship between the customer and the vendor is Transaction. The system collects information of customer’s id, name, email, location, phone number. The vendor may also have the information like as TIN number, Shop name, Location, phone number. Payment can be cash out delivery and online payment. Then, delivery man places order to customer delivery status contains departure time and arrival time.

**ER Diagram:**



**Normalization:**

**Transaction** (TIN number , shop\_name, phone number,name, location,c\_id)

**1NF:**

phone number multivalued attribute

**2NF:**

TIN number, phone number, shop\_name

c\_id ,name, phone number,location

TC\_id,TIN number ,c\_id

**3NF:**

TIN number, phone number, shop\_name

c\_id ,name, phone number,location

TC\_id,TIN number ,c\_id

No transitive dependency

**Table:**

TIN number, phone number, shop\_name

c\_id ,name, phone number,location

TC\_id,TIN number ,c\_id

**Order**(c\_id,name,location,phone\_number,d\_id,email,name,phone\_number)

**1NF:**

Phone number  multivalued attribute

**2NF:**

c\_id , name,location, phone number

d\_id, email, name, phone\_number

CD\_id,d\_id,c\_id

**3NF:**

c\_id , name,location, phone number

d\_id, email, name, phone\_number

CD\_id,d\_id,c\_id

No transitive dependency

**Table:**

c\_id , name,location, phone number

d\_id, email, name, phone\_number

CD\_id,d\_id,c\_id

**Places (**name,location , phone\_number,c\_id, payment , transaction\_id**)**

**1NF:**

  Phone number multivalued attribute

**2NF:**

c\_id, name, location, phone\_number

Transaction\_id,Payment

CT\_id,C\_id, Transaction\_id

**3NF:**

C\_id, name, location, phone\_number

Transaction\_id,Payment

CT\_id,C\_id, Transaction\_id

 No transitive dependency

**Table:**

C\_id, name, location, phone\_number

Transaction\_id,Payment

CT\_id,c\_id, Transaction\_id

**Delivers** (food\_id, price, type, item\_name, quantity, TIN\_number, phone\_number,shop\_name)

**1NF:**

Phone number multivalued attribute.

**2NF:**

Food\_id, price, type, item\_name, quantity

TIN\_number, phone\_number,shop\_name

**3NF:**

Food\_id, price, type, item\_name, quantity

TIN\_number, phone\_number,shop\_name

**Table:**

Food\_id, price, type, item\_name, quantity

TIN\_number, phone\_number,shop\_name

**Total Table:**

TIN number, phone number, shop\_name

c\_id ,name, phone number,location

TC\_id,TIN number ,c\_id

~~c\_id , name,location, phone number~~

d\_id, email, name, phone\_number

CD\_id,d\_id,c\_id

~~c\_id, name, location, phone\_number~~

Transaction\_id,Payment

CT\_id,c\_id, Transaction\_id

Food\_id, price, type, item\_name, quantity

~~TIN\_number, phone\_number,shop\_name~~

**Final Table:**

TIN number, phone number, shop\_name

c\_id ,name, phone number,location

TC\_id,TIN number ,c\_id

d\_id, email, name, phone\_number

CD\_id,d\_id,c\_id

Transaction\_id,Payment

CT\_id,c\_id, Transaction\_id

Food\_id, price, type, item\_name, quantity

**Table Creation:**

**1**. Create table TIN\_info

(

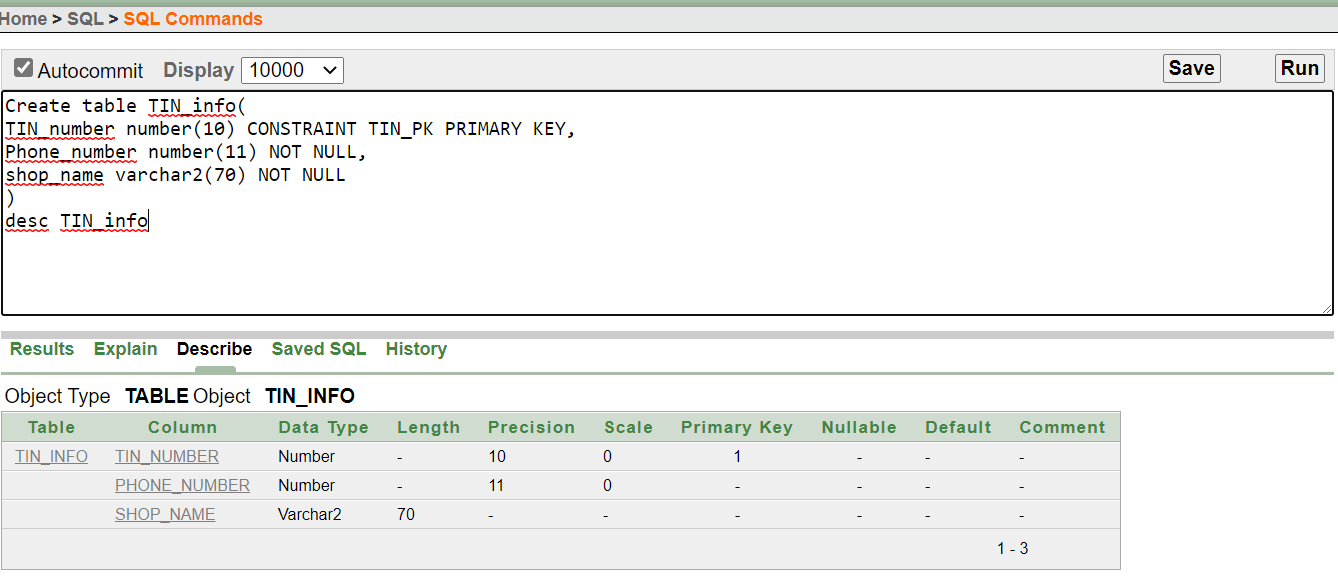
TIN\_number number(10) CONSTRAINT TIN\_PK PRIMARY KEY,

Phone\_number number(11) NOT NULL,

shop\_name varchar2(70) NOT NULL

)

desc TIN\_info



**2.** Create table customer\_info

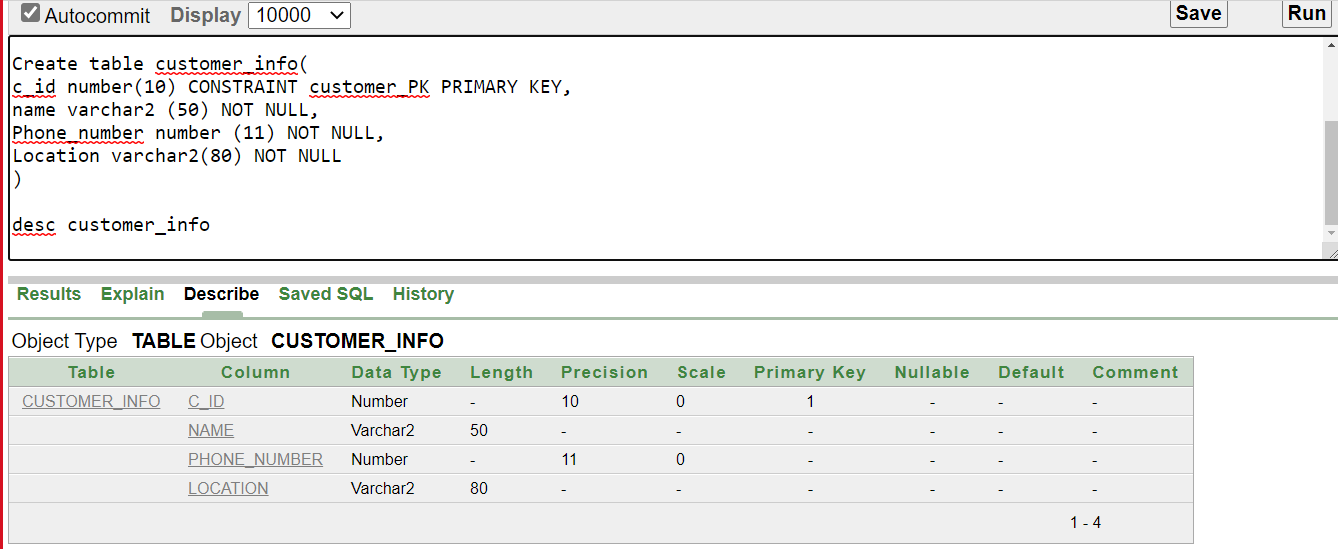
(

c\_id number(10) CONSTRAINT customer\_PK PRIMARY KEY,

name varchar2 (50) NOT NULL,

Phone\_number number (11) NOT NULL,

Location varchar2(80) NOT NULL

)

**3.** Create table TC\_info

(

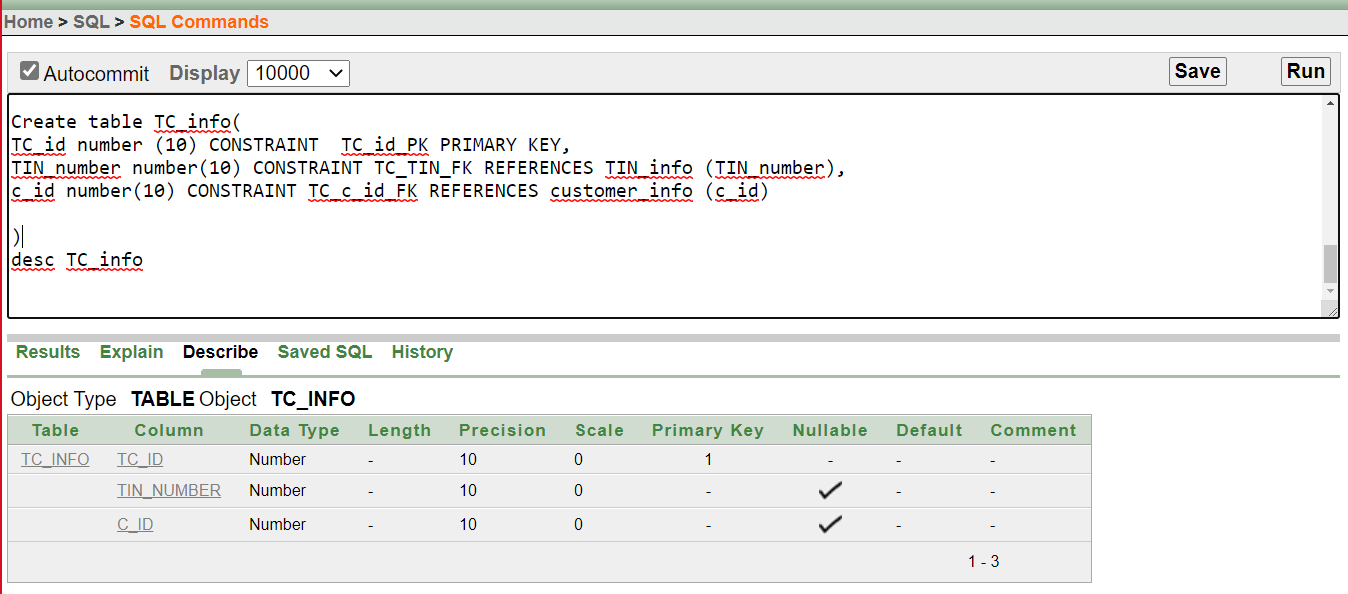
TC\_id number (10) CONSTRAINT TC\_id\_PK PRIMARY KEY,

TIN\_number number(10) CONSTRAINT TC\_TIN\_FK REFERENCES TIN\_info (TIN\_number),

c\_id number(10) CONSTRAINT TC\_c\_id\_FK REFERENCES customer\_info (c\_id)

)

desc TC\_info



**4.** Create table delivery\_man\_info

(

did number(5) CONSTRAINT d\_PK PRIMARY KEY,

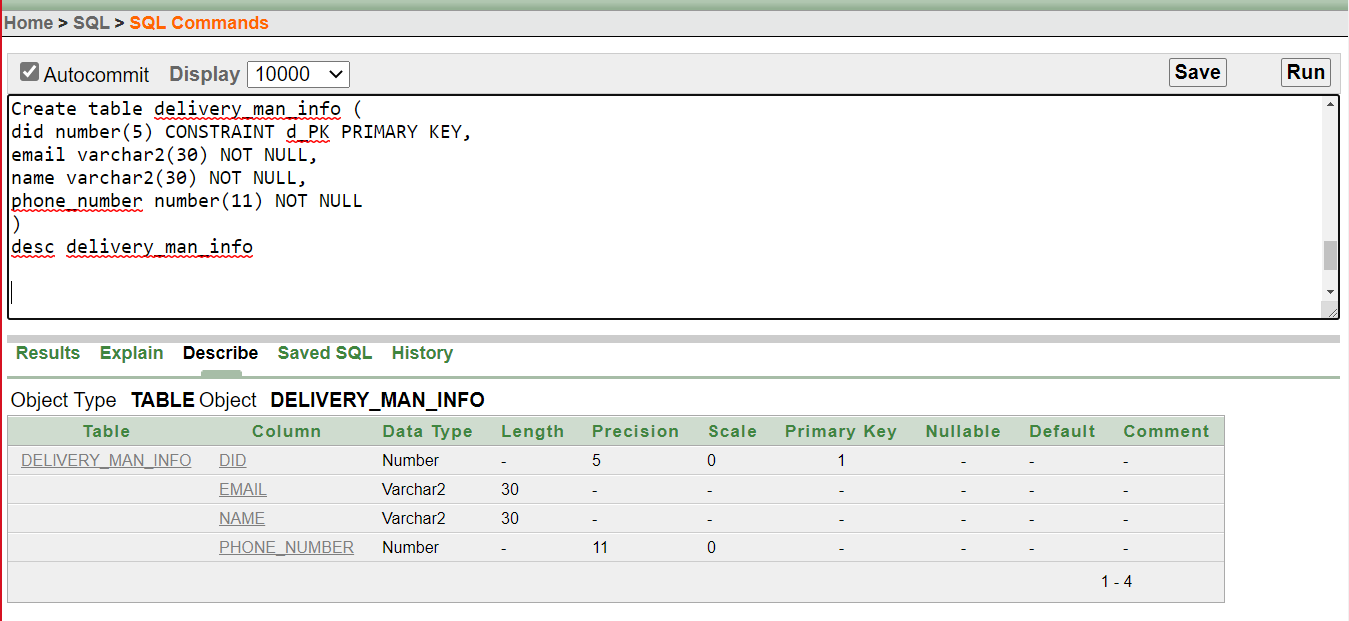
email varchar2(30) NOT NULL,

name varchar2(30) NOT NULL,

phone\_number number(11) NOT NULL

)

desc delivery\_man\_info



**5.** Create table CD\_info

(

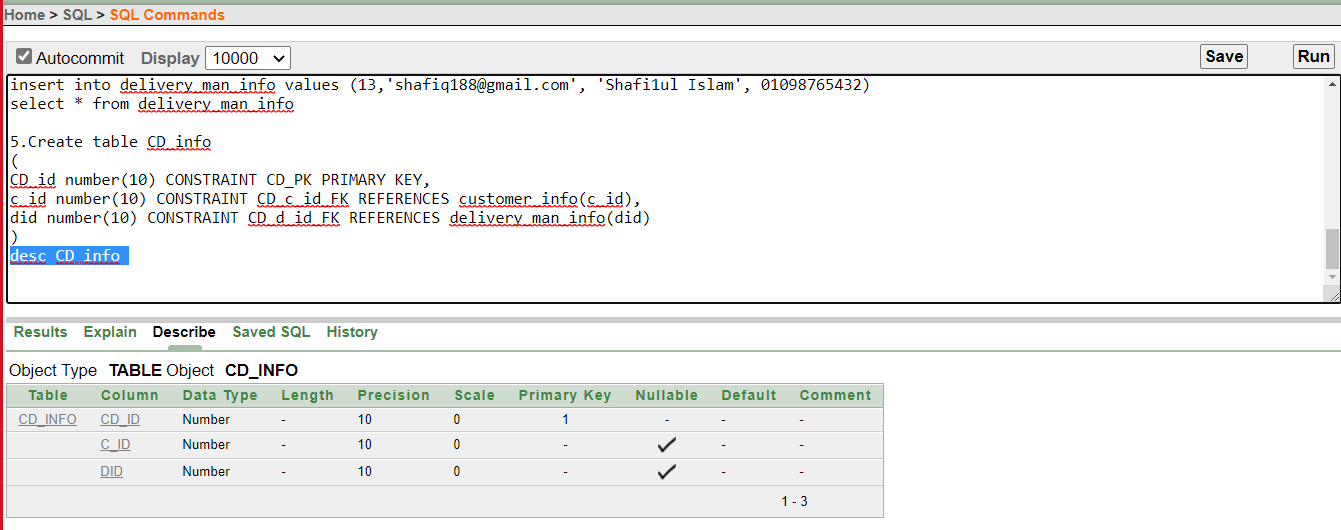
CD\_id number(10) CONSTRAINT CD\_PK PRIMARY KEY,

c\_id number(10) CONSTRAINT CD\_c\_id\_FK REFERENCES customer\_info(c\_id),

did number(10) CONSTRAINT CD\_d\_id\_FK REFERENCES delivery\_man\_info(did)

)

desc CD\_info



**6.** Create table orderPlace\_info

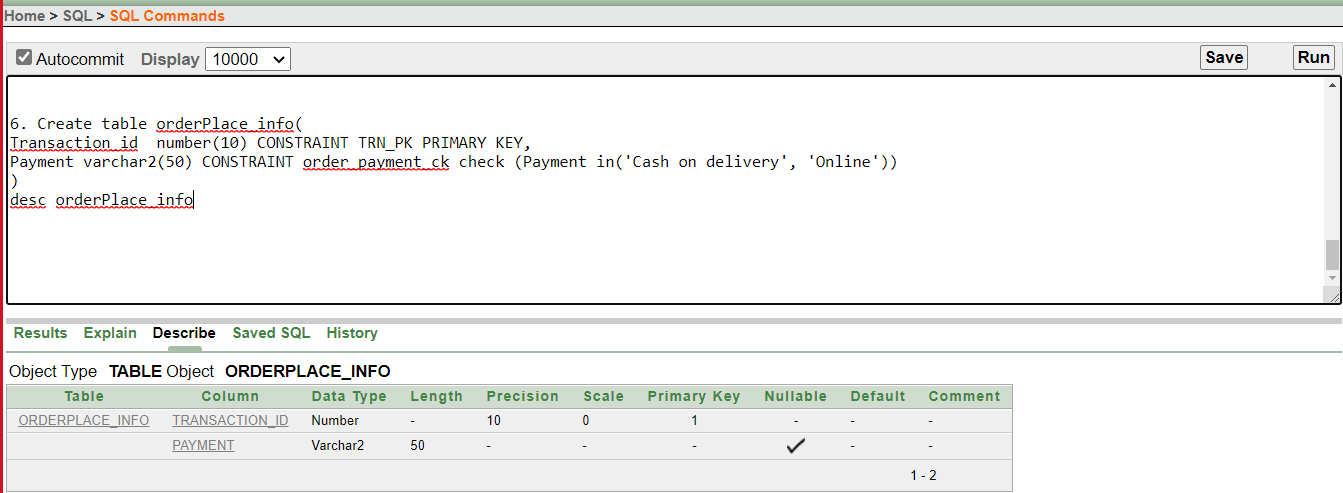
(

Transaction\_id number(10) CONSTRAINT TRN\_PK PRIMARY KEY,

Payment varchar2(50) CONSTRAINT order\_payment\_ck check (Payment in('Cash on delivery', 'Online'))

)

desc orderPlace\_info



**7.** Create table CT\_id\_info

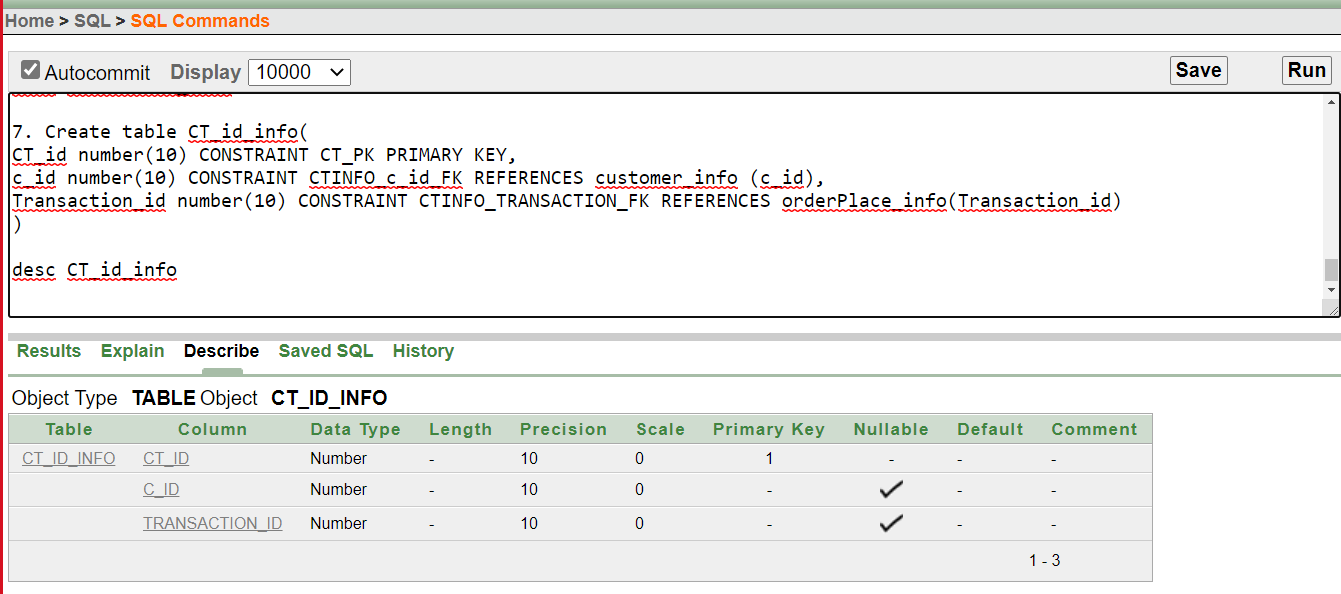
(

CT\_id number(10) CONSTRAINT CT\_PK PRIMARY KEY,

c\_id number(10) CONSTRAINT CTINFO\_c\_id\_FK REFERENCES customer\_info (c\_id),

Transaction\_id number(10) CONSTRAINT CTINFO\_TRANSACTION\_FK REFERENCES orderPlace\_info(Transaction\_id)

)



**8.**

Create table food\_info

(

food\_id number(10) CONSTRAINT FOOD\_INFO\_ID\_PK PRIMARY KEY,

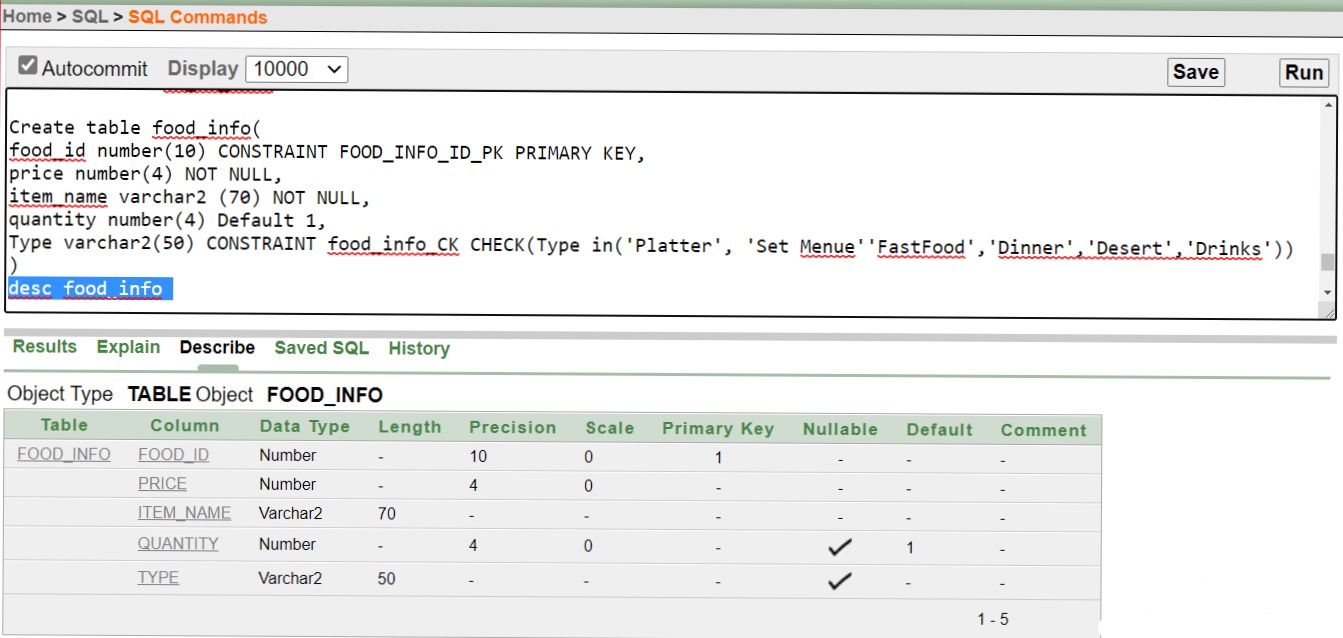
price number(4) NOT NULL,

item\_name varchar2 (70) NOT NULL,

quantity number(4) Default 1,

Type varchar2(50) CONSTRAINT food\_info\_CK CHECK(Type in('Platter', 'Set Menue''FastFood','Dinner','Desert','Drinks'

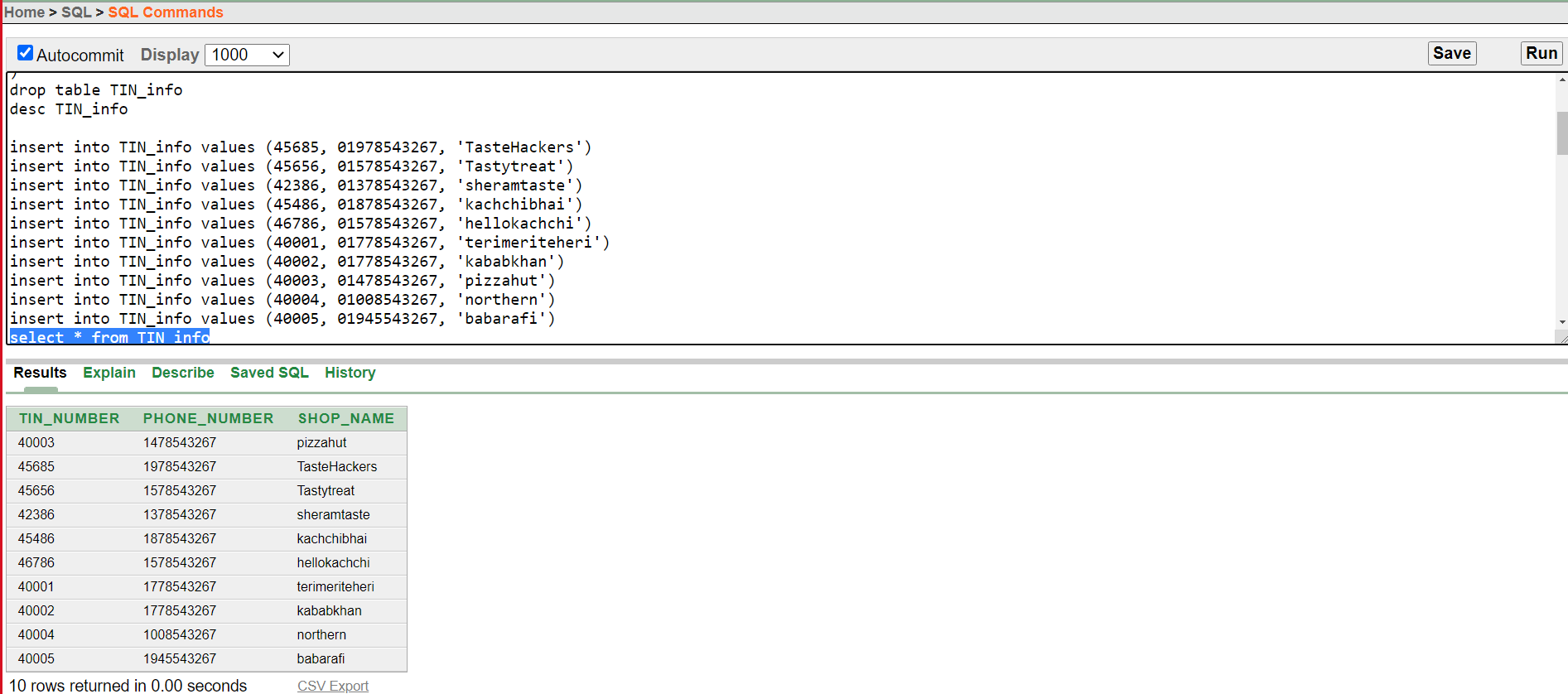
)



**Table Insertion**

**1.**

insert into TIN\_info values (45685, 01978543267, 'TasteHackers')  
insert into TIN\_info values (45656, 01578543267, 'Tastytreat')  
insert into TIN\_info values (42386, 01378543267, 'sheramtaste')  
insert into TIN\_info values (45486, 01878543267, 'kachchibhai')  
insert into TIN\_info values (46786, 01578543267, 'hellokachchi')  
insert into TIN\_info values (40001, 01778543267, 'terimeriteheri')  
insert into TIN\_info values (40002, 01778543267, 'kababkhan')  
insert into TIN\_info values (40003, 01478543267, 'pizzahut')  
insert into TIN\_info values (40004, 01008543267, 'northern')  
insert into TIN\_info values (40005, 01945543267, 'babarafi')



**2.**

insert into customer\_info values(34567, 'Md Mahir', 01234567890, 'MohammadPur,Tajmahal Road, Block C')

insert into customer\_info values(2001, 'dami Hossain', 01545678902, 'BashundharaR/A,Block A Street#07')

insert into customer\_info values(2002, 'sami Hossain', 01655678902, 'BashundharaR/A,Block B Street#07')

insert into customer\_info values(2003, 'rafi Hossain', 01765678902, 'BashundharaR/A,Block C Street#07')

insert into customer\_info values(2004, 'rabbi Hossain', 04545678902, 'BashundharaR/A,Block D Street#07')

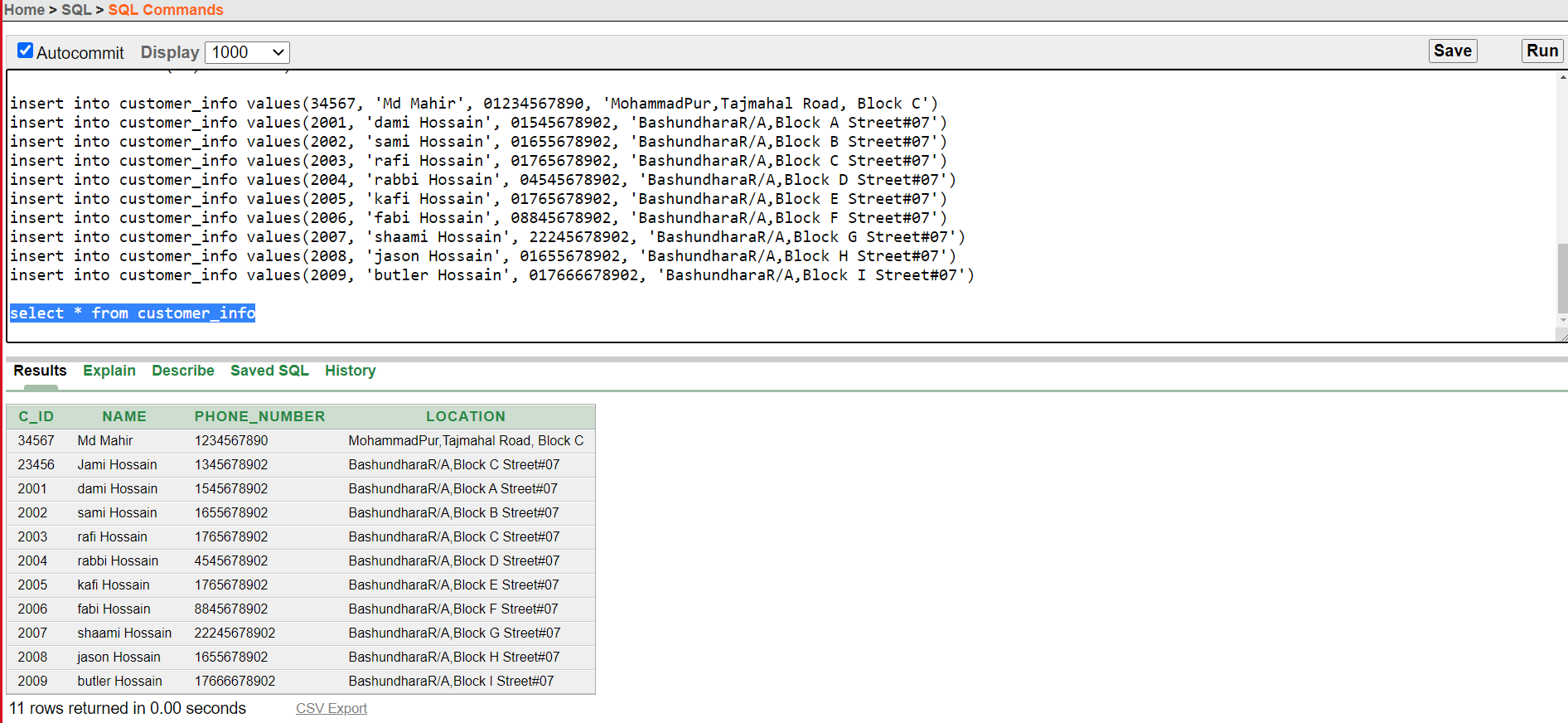
insert into customer\_info values(2005, 'kafi Hossain', 01765678902, 'BashundharaR/A,Block E Street#07')

insert into customer\_info values(2006, 'fabi Hossain', 08845678902, 'BashundharaR/A,Block F Street#07')

insert into customer\_info values(2007, 'shaami Hossain', 22245678902, 'BashundharaR/A,Block G Street#07')

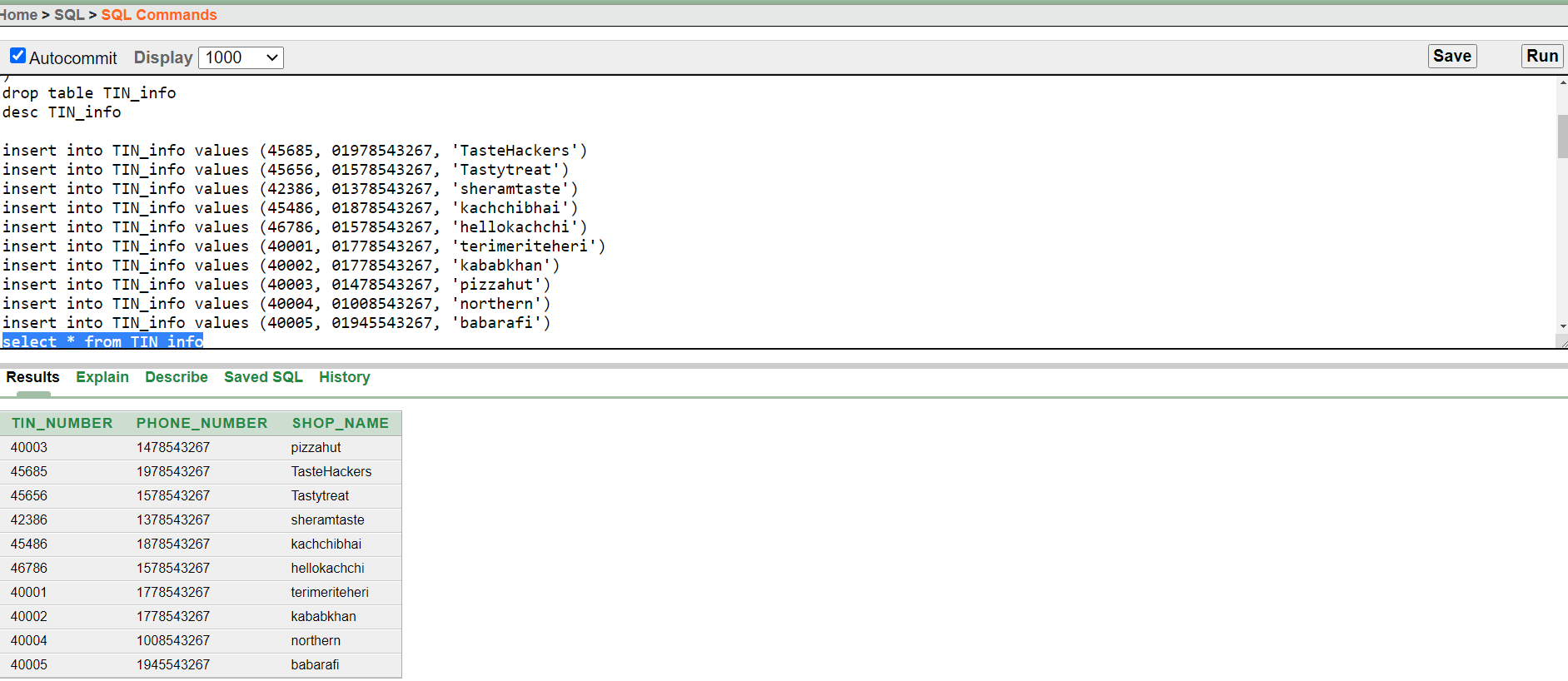
insert into customer\_info values(2008, 'jason Hossain', 01655678902, 'BashundharaR/A,Block H Street#07')

insert into customer\_info values(2009, 'butler Hossain', 017666678902, 'BashundharaR/A,Block I Street#07')



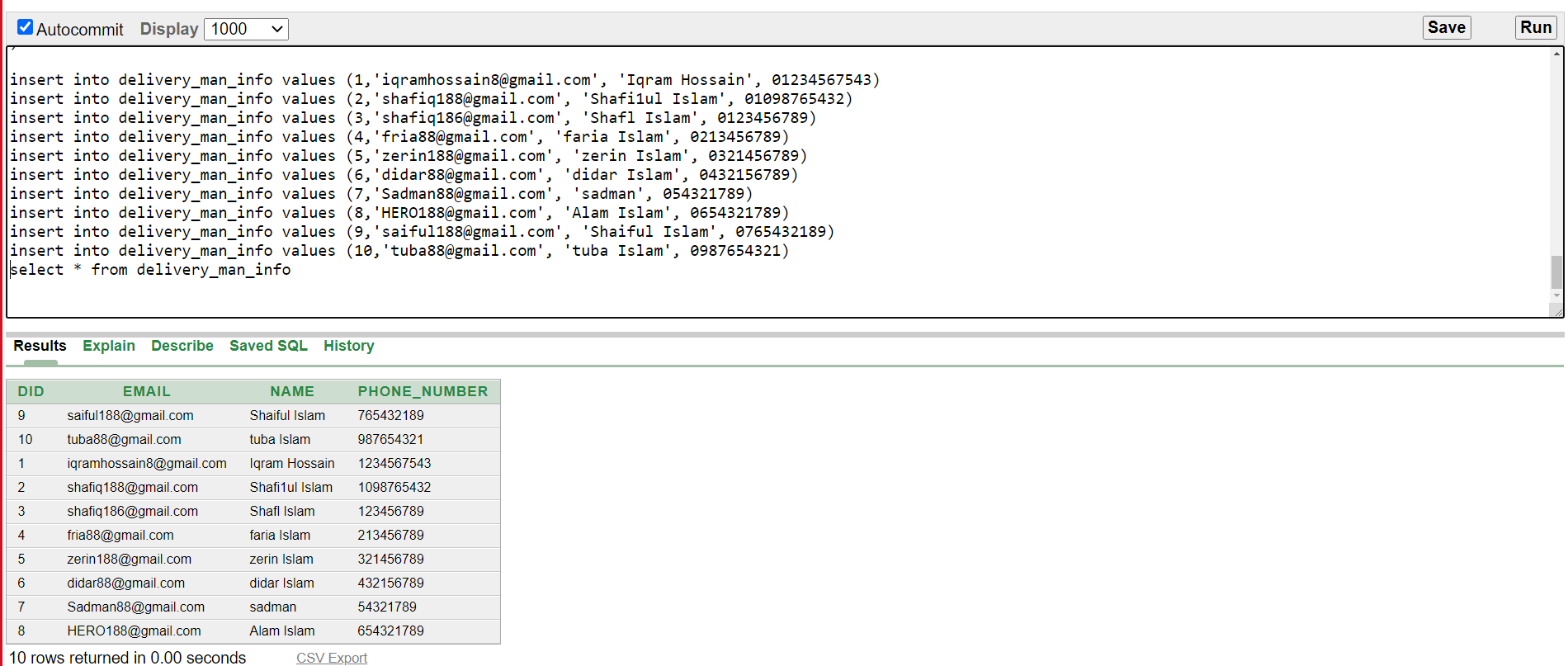
**3.**

insert into TC\_info values (555,45656,2001)  
insert into TC\_info values ( 777, 42386, 2002)  
insert into TC\_info values (565,45486,2003)  
insert into TC\_info values ( 888, 46786, 2004)  
insert into TC\_info values (001,40001,2005)  
insert into TC\_info values ( 002, 40002, 2006)  
insert into TC\_info values (7,40003,2007)  
insert into TC\_info values ( 004, 40004, 2008)  
insert into TC\_info values (566,40005,2009)

insert into TC\_info values ( 456, 45685, 34567)  


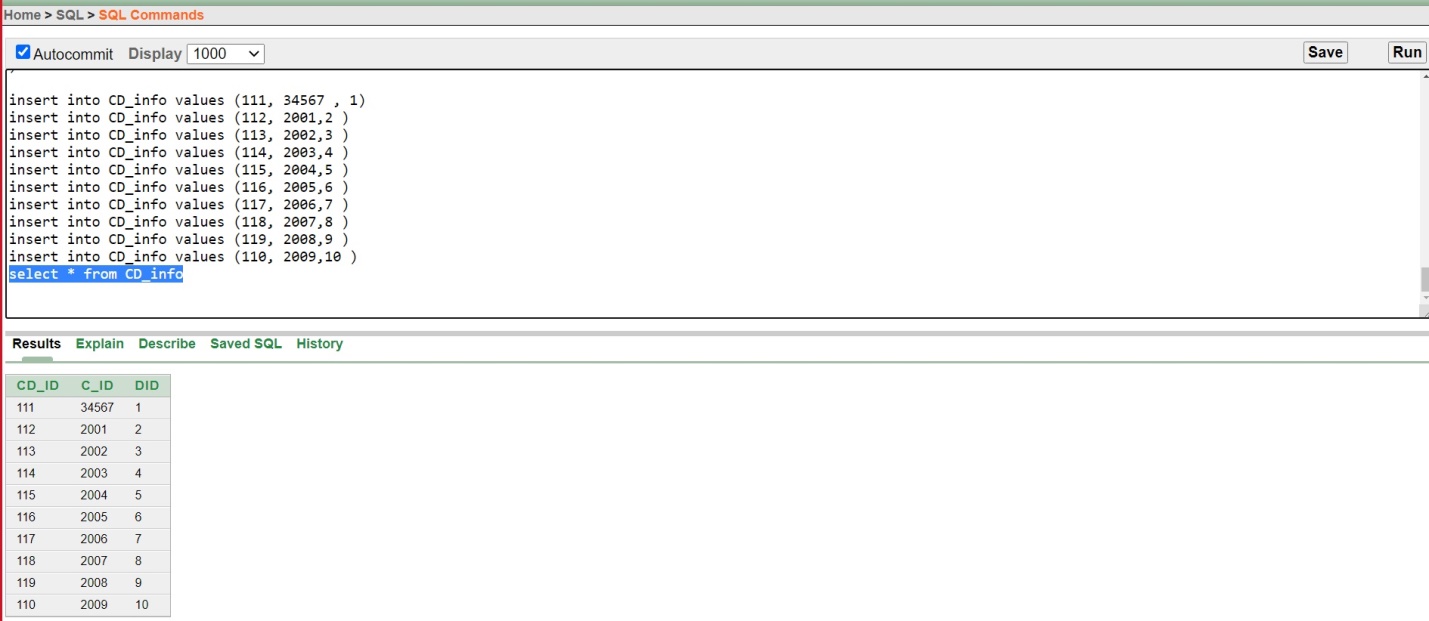
**4.**

insert into delivery\_man\_info values (1,'iqramhossain8@gmail.com', 'Iqram Hossain', 01234567543)  
insert into delivery\_man\_info values (2,'shafiq188@gmail.com', 'Shafi1ul Islam', 01098765432)  
insert into delivery\_man\_info values (3,'shafiq186@gmail.com', 'Shafl Islam', 0123456789)  
insert into delivery\_man\_info values (4,'fria88@gmail.com', 'faria Islam', 0213456789)  
insert into delivery\_man\_info values (5,'zerin188@gmail.com', 'zerin Islam', 0321456789)  
insert into delivery\_man\_info values (6,'didar88@gmail.com', 'didar Islam', 0432156789)  
insert into delivery\_man\_info values (7,'Sadman88@gmail.com', 'sadman', 054321789)  
insert into delivery\_man\_info values (8,'HERO188@gmail.com', 'Alam Islam', 0654321789)  
insert into delivery\_man\_info values (9,'saiful188@gmail.com', 'Shaiful Islam', 0765432189)  
insert into delivery\_man\_info values (10,'tuba88@gmail.com', 'tuba Islam', 0987654321)



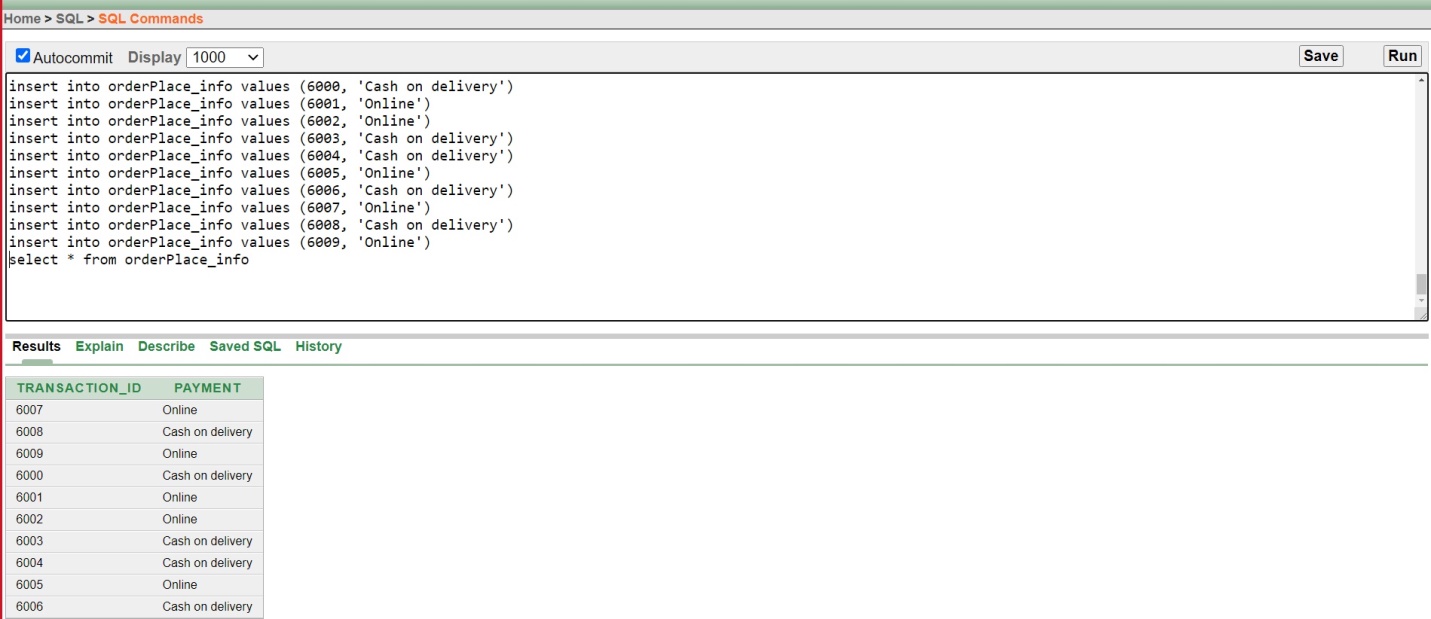
**5.**

insert into CD\_info values (111, 34567 , 1)  
insert into CD\_info values (112, 2001,2 )  
insert into CD\_info values (113, 2002,3 )  
insert into CD\_info values (114, 2003,4 )  
insert into CD\_info values (115, 2004,5 )  
insert into CD\_info values (116, 2005,6 )  
insert into CD\_info values (117, 2006,7 )  
insert into CD\_info values (118, 2007,8 )  
insert into CD\_info values (119, 2008,9 )  
insert into CD\_info values (110, 2009,10 )



**6.**

insert into orderPlace\_info values (6000, 'Cash on delivery')  
insert into orderPlace\_info values (6001, 'Online')  
insert into orderPlace\_info values (6002, 'Online')  
insert into orderPlace\_info values (6003, 'Cash on delivery')  
insert into orderPlace\_info values (6004, 'Cash on delivery')  
insert into orderPlace\_info values (6005, 'Online')  
insert into orderPlace\_info values (6006, 'Cash on delivery')  
insert into orderPlace\_info values (6007, 'Online')  
insert into orderPlace\_info values (6008, 'Cash on delivery')  
insert into orderPlace\_info values (6009, 'Online')



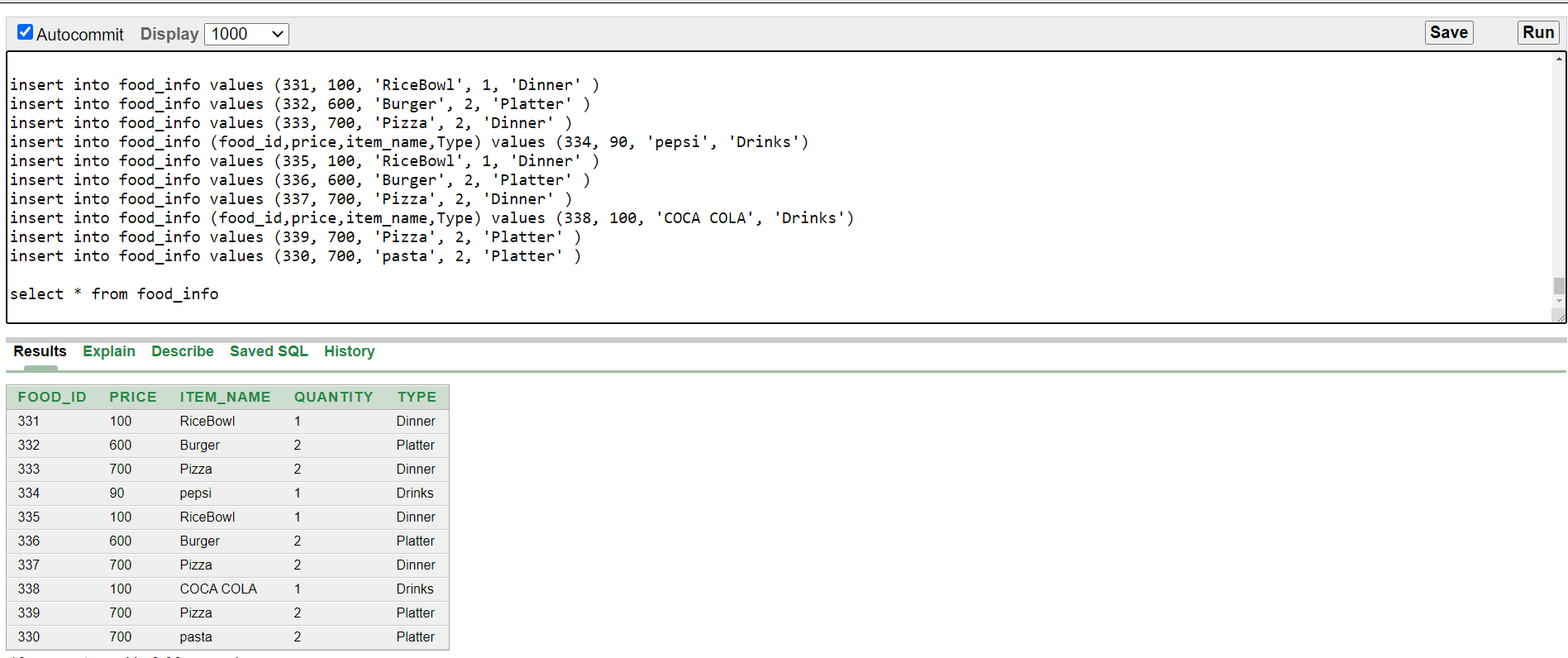
**7.**

insert into CT\_id\_info values (221, 34567,6000 )  
insert into CT\_id\_info values (222, 2001, 6001 )  
insert into CT\_id\_info values (223, 2002, 6002 )  
insert into CT\_id\_info values (224, 2003, 6003 )  
insert into CT\_id\_info values (225, 2004, 6004 )  
insert into CT\_id\_info values (226, 2005, 6005 )  
insert into CT\_id\_info values (227, 2006, 6006 )  
insert into CT\_id\_info values (228, 2007, 6007 )  
insert into CT\_id\_info values (229, 2008, 6008 )  
insert into CT\_id\_info values (220, 2009, 6009 )



**8.**

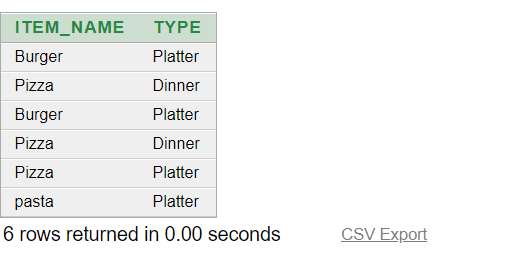
insert into food\_info values (331, 100, 'RiceBowl', 1, 'Dinner' )  
insert into food\_info values (332, 600, 'Burger', 2, 'Platter' )  
insert into food\_info values (333, 700, 'Pizza', 2, 'Dinner' )  
insert into food\_info (food\_id,price,item\_name,Type) values (334, 90, 'pepsi', 'Drinks')  
insert into food\_info values (335, 100, 'RiceBowl', 1, 'Dinner' )  
insert into food\_info values (336, 600, 'Burger', 2, 'Platter' )  
insert into food\_info values (337, 700, 'Pizza', 2, 'Dinner' )  
insert into food\_info (food\_id,price,item\_name,Type) values (338, 100, 'COCA COLA', 'Drinks')  
insert into food\_info values (339, 700, 'Pizza', 2, 'Platter' )  
insert into food\_info values (330, 700, 'pasta', 2, 'Platter' )

****

**Subquery:**

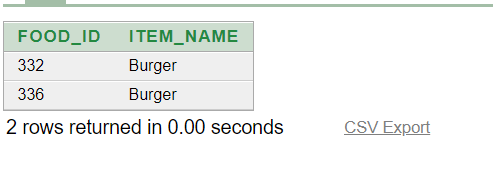
**1.Display the item name and type for all customer who ordered more than employee number 2536**

Ans: select item\_name,type from food\_info where quantity>(select quantity from food\_info where food\_id= 331 )



**2. Display the food id and item name for all customers whose price is equal to the price of food id 2345**

Ans: select food\_id,item\_name from food\_info where price = (select price from food\_info where food\_id = 332)



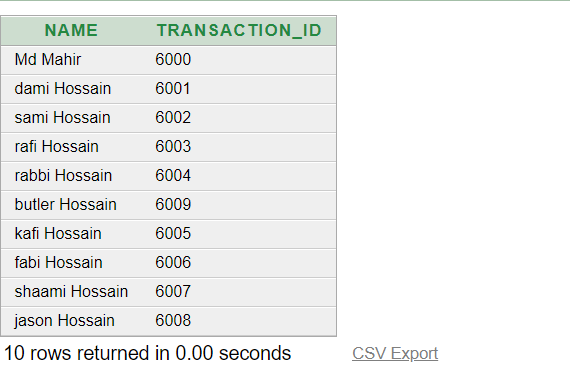
**3.Display the item name and the price of the food where price is higher than the food type named ='Drinks'**

Ans: select item\_name,price from food\_info where price>(select price from food\_info where type = 'Drinks')

**Joining:**

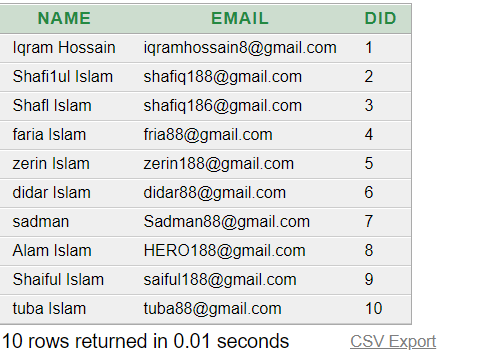
**1.display the customer name, customer id and transaction number**

Ans: select c.name, CT.transaction\_id from customer\_info c, CT\_id\_info CT where c.c\_id = CT.c\_id



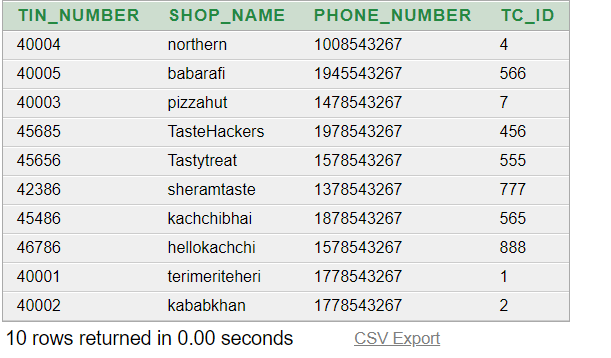
**2. display delivery man name, delivery man e-mail and id**

select d.name, d.email, CD.did from delivery\_man\_info d, CD\_info CD where d.did= CD.did



**3. display shop name, shop phone number, TC id and TIN number**

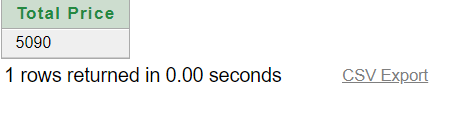
select TIN.TIN\_number,TIN.shop\_name, TIN.phone\_number, TC.TC\_id from TIN\_info TIN, TC\_info TC where TC.TIN\_number= TIN.TIN\_number



**Group Function:**

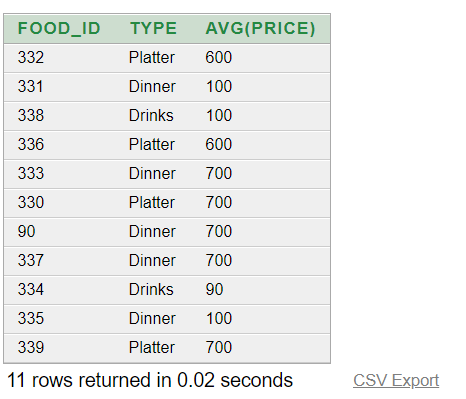
**1.Display price and the total price of the food**

Ans: select SUM(price) as "Total Price" from food\_info



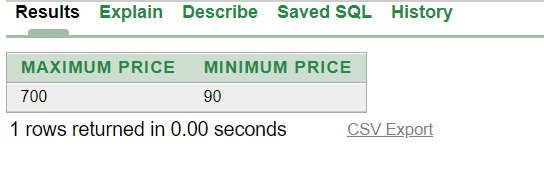
**2. display food number, food type which has ordered by customer and also display the average price**

Ans: select food\_id , type, avg(price) from food\_info group by food\_id, type

****

**3.display the maximnum and minimum price of the food which has ordered already by customer**

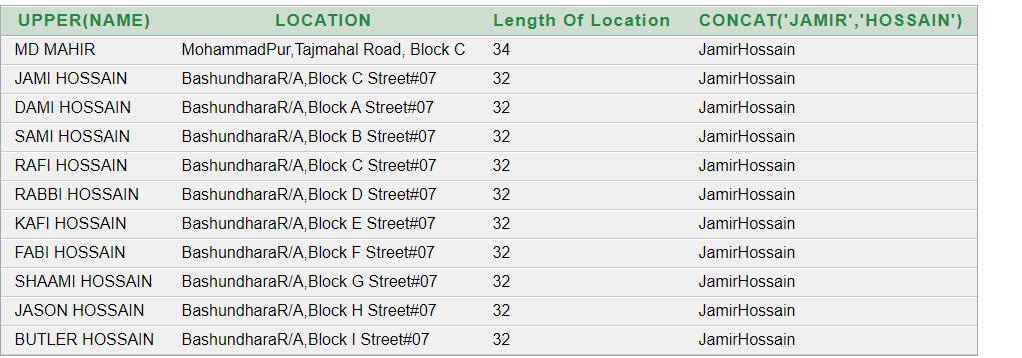
select max(price) AS "MAXIMUM PRICE" , min (price) AS "MINIMUM PRICE" from food\_info



**Single Row Function:**

Q: Write a query to display the customer customer name in upper case, Location, Length of the location

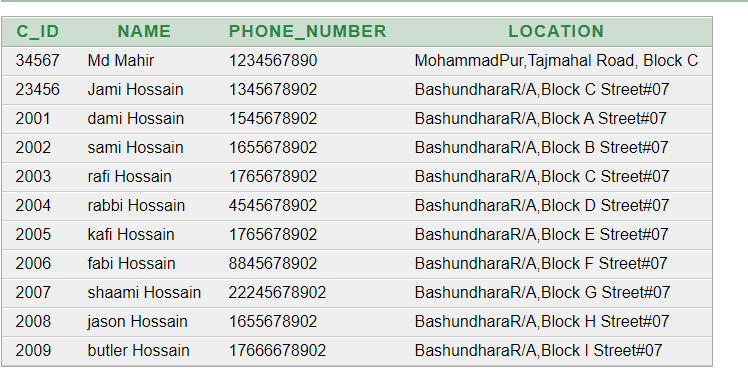
Ans:select UPPER(name) , Location ,length (location) AS "Length of location",

****

**View:**

1. **Create a view called CUSTM\_VU based on the customer id, customer name,phone, number and location from the CUSTOMER\_IFO table. .**

Ans: CREATE view CUSTM\_VU AS select C\_ID, NAME ,PHONE\_NUMBER, LOCATION FROM CUSTOMER\_INFO



**Sequence:**

Create sequence ordered\_food\_price

start with 90

maxvalue 700

increment by 1

drop sequence ordered\_food\_price

insert into food\_info (food\_id, price, item\_name, quantity, type) values (ordered\_food\_price.nextval,700, 'Pizza', 1, 'Dinner')

