

Introduction to Database

Project Topic: KFC Management System.

Section : J

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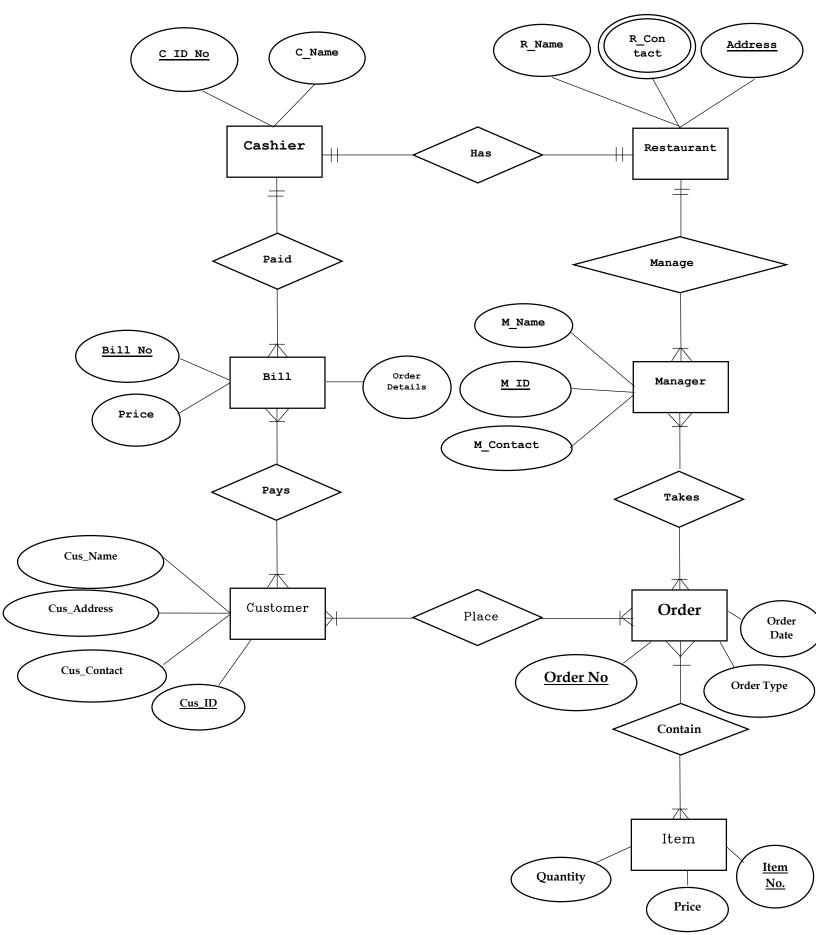
Introduction:

KFC (Kentucky Fried Chicken) is one of the leading fast food concepts of today. Starting the United States in the 1930s, it has grown to become a true multi-domestic company. KFC has focused on foreign markets since the 1960s and has initiated a new challenge today in conquering Asia. KFC, known as Kentucky Fried Chicken, is a chain of fast food restaurants based in Louisville, Kentucky. In the midst of the depression, Harland Sanders who was born just outside Henry vile, opens his first restaurants in the small front room of a gas station in Corbin, Kentucky. The target customer of KFC [Upper, Middle and above] are healthy conscious and hence to cater to their interest Kentucky fried Chicken changed its name to KFC.

Case Study:

KFC (Kentucky Fried Chicken) is one of the most popular and widely spread fast-food restaurants in our country. In the KFC management system the cashier's id, name will be stored in the database. The restaurant has a cashier to manage the system of KFC. There is a lot of branches of KFC restaurants. So, in the restaurant where the restaurant's name, multiple contact number, the address will be stored in the database. The restaurant is managed by a number of manager. The information of the manager (Name, ID number, Contact number) will be recorded in the database. The manager takes orders. The information about the order (Order number, Order Date, Order Type) will be stored. The information of the item (Quantity, Item Number, Price, and Description) will be stored in the database. The order contains the item. The order places the customer and the information of the customer are (Name, address, contact number, id). The customer pays the bill. Here the information about the bill (Bill number, price, and other details) will be recorded. The bill paid to the cashier. All the above information will be stored in the database. Now drawing an ER Diagram according to the mentioned scenario.

ER Diagram:



```
Has (C_ID No, C_Name, R_Contact, Address, R_Name)
1NF: Contact multivalued attribute
2NF:
       C_ID No, C_Name
       Address, R_Contact, R_Name, C_ID No
3NF:
      C_ID No , C_Name
      Address, R_Contact, R_Name, C_ID No
      No transitive dependency
Table:
      C_ID No_, C_Name
       Address, R_Contact, R_Name, C_ID No
Paid (Bill_No, Price, Order_Details, C_ID No, C_Name)
1NF: No multivalued attribute
2NF:
      Bill_No_, Price, Order_Details, C_ID No
      C_ID No, C_Name
3NF:
      Bill_No , Price , Order_Details, C_ID No
      C_ID No, C_Name
      No transitive dependency
Table:
      Bill_No , Price , Order_Details, C_ID No
      C_ID No, C_Name
```

Pays (Bill_No , Price , Order_Details , Cus_Name, Cus_Address , Cus_Contact ,
Cus_ID)

1NF: No multivalued attribute

2NF:

<u>Bill_No_</u>, Price, Order_Details
<u>Cus_ID</u>, Cus_Name, Cus_Address, Cus_Contact
<u>BCus_ID</u>, Bill_No, Cus_ID

3NF:

<u>Bill_No</u>, Price, Order_Details

 $\underline{\text{Cus_ID}}$, $\underline{\text{Cus_Name}}$, $\underline{\text{Cus_Address}}$, $\underline{\text{Cus_Contact}}$

BCus_ID, Bill_No, Cus_ID

No transitive dependency

Table:

<u>Bill_No_</u>, Price, Order_Details
<u>Cus_ID</u>, Cus_Name, Cus_Address, Cus_Contact
<u>BCus_ID</u>, Bill_No, Cus_ID

 $\label{eq:place_cus_def} \textbf{Place}~(\underline{Cus_ID}~,\,Cus_Name,\,Cus_Address~,\,Cus_Contact~,\,\underline{Order_No}~,\,Order_Date~,\\ Order_Type~)$

1NF: No multivalued attribute

2NF:

<u>Cus_ID</u>, Cus_Name, Cus_Address, Cus_Contact
<u>Order No</u>, Order_Date, Order_Type
<u>COr_No</u>, Cus_ID, Order No

3NF:

<u>Cus_ID</u>, Cus_Name, Cus_Address, Cus_Contact
<u>Order No</u>, Order_Date, Order_Type
COr_No, Cus_ID, Order No

No transitive dependency

Table:

<u>Cus_ID</u> , Cus_Name, Cus_Address , Cus_Contact
<u>Order No</u> , Order_Date ,Order_Type
<u>COr_No</u> , Cus_ID , Order No

 $\textbf{Contain} \; \left(\; \underline{\text{Order No}} \; , \; \underline{\text{Order_Date ,Order_Type }} \; , \; \underline{\text{Item No}} \; , \; \underline{\text{Quantity , Price ,}} \; \right.$

1NF: No Multivalued Attribute

2NF:

Order No , Order_Date ,Order_Type

Item No , Quantity , Price

IT No , Order_No , Item_No

3NF:

Order No , Order_Date ,Order_Type

Item No , Quantity , Price

IT No , Order_No , Item_No

No transitive dependency

Table:

Order No , Order_Date ,Order_Type

Item No , Quantity , Price

IT No , Order_No , Item_No

Takes (Order_No, Order_Date, Order_Type, M_ID, M_Name, M_Contact)

1NF: No multivalued attribute

2NF:

M_ID , M_Name, M_Contact
Order_No , Order_Date ,Order_Type
OM _No , M_ID , Order_No

3NF:

M_ID , M_Name, M_Contact

Order_No , Order_Date ,Order_Type

OM_No, M_ID, Order_No

No transitive dependency

Table:

M_ID, M_Name, M_Contact

Order_No , Order_Date ,Order_Type

OM _No , M_ID , Order_No

Manager (M_ID_, M_Name, M_Contact, Address, R_Contact, R_Name)

1NF: R Contact multivalued attribute

2NF:

M_ID, M_Name, M_Contact

Address, R_Contact, R_Name

MA_No, M_ID, Address

3NF:

M_ID, M_Name, M_Contact

Address, R_Contact, R_Name

MA_No, M_ID, Address

No transitive dependency

Table:

M_ID , M_Name, M_Contact

Address, R_Contact, R_Name

MA_No, M_ID, Address

Total table :

C_ID No , C_Name

Address, R_Contact, R_Name, C_ID No

Bill_No_, Price, Order_Details, C_ID No

C_ID No, C_Name

<u>Bill_No_</u>, Price, Order_Details

Cus_ID , Cus_Name, Cus_Address , Cus_Contact

BCus_ID, Bill_No, Cus_ID

Cus_ID , Cus_Name, Cus_Address , Cus_Contact

Order No , Order_Date ,Order_Type

COr_No_, Cus_ID , Order No

Order_No , Order_Date ,Order_Type

Item No, Quantity, Price

IT No , Order_No , Item_No

M_ID, M_Name, M_Contact

Order_No_, Order_Date ,Order_Type

OM_No, M_ID, Order_No

M_ID, M_Name, M_Contact

Address, R_Contact, R_Name

MA _No , M_ID , Address

Final table :

C_ID No , C_Name

Address, R_Contact, R_Name, C_ID No

Bill_No , Price , Order_Details, C_ID No

Cus_ID , Cus_Name, Cus_Address , Cus_Contact

BCus_ID, Bill_No, Cus_ID

Order No , Order_Date ,Order_Type

COr_No , Cus_ID , Order No

Item No, Quantity, Price

IT No , Order_No , Item_No

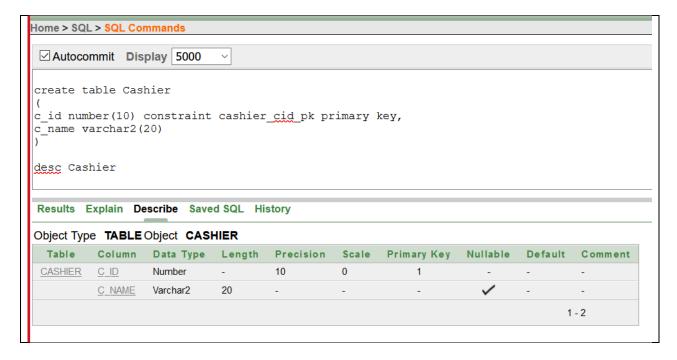
M_ID , M_Name, M_Contact

OM _No , M_ID , Order_No

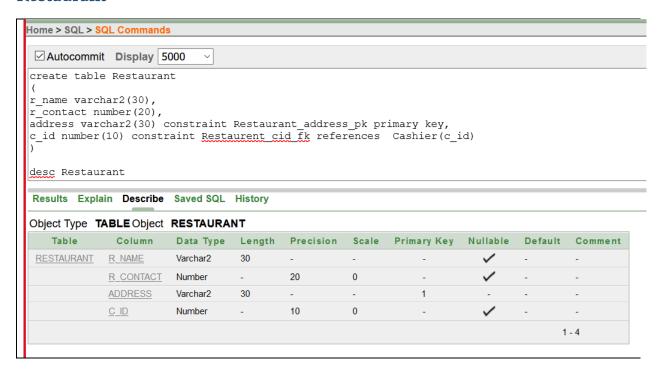
MA_No, M_ID, Address

Table Creation

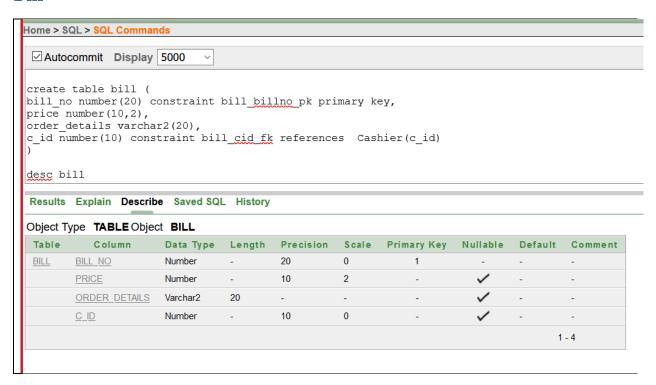
Cashier



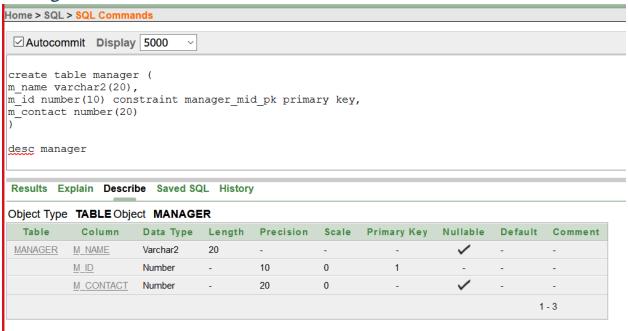
Restaurant



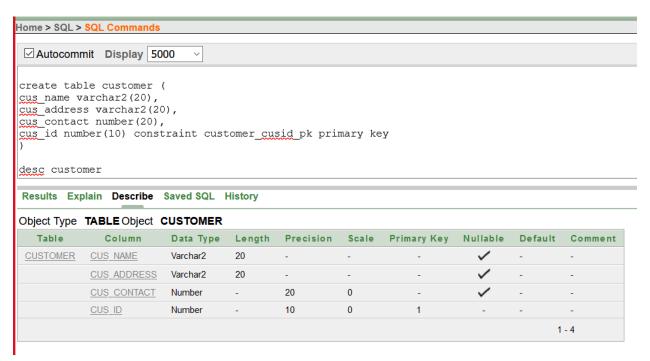
Bill



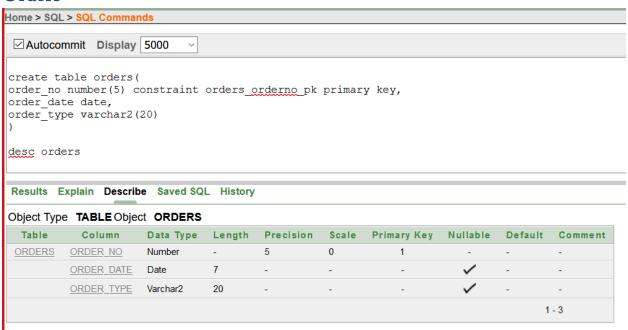
Manager



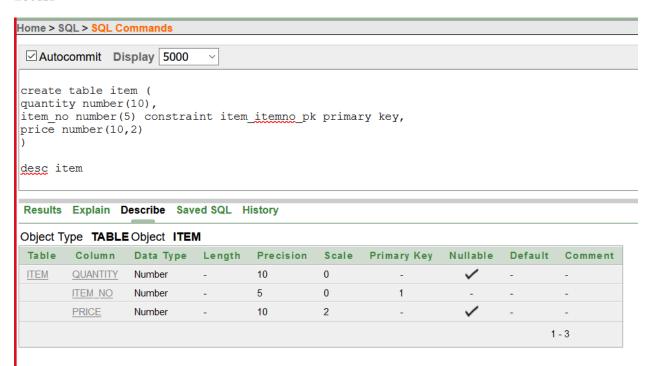
Customer



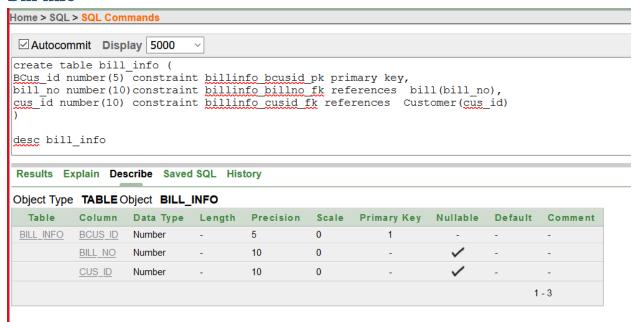
Orders



Item



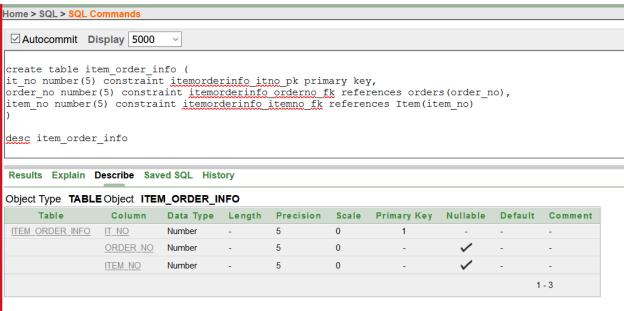
Bill info



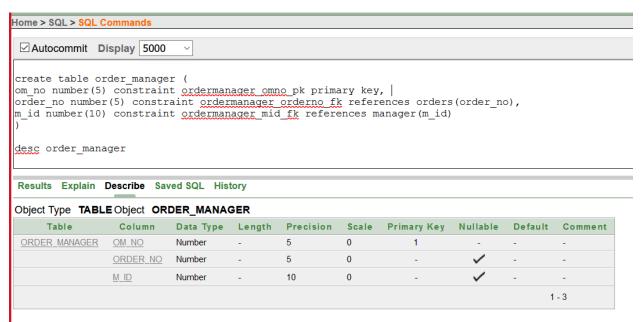
Customer_order_info



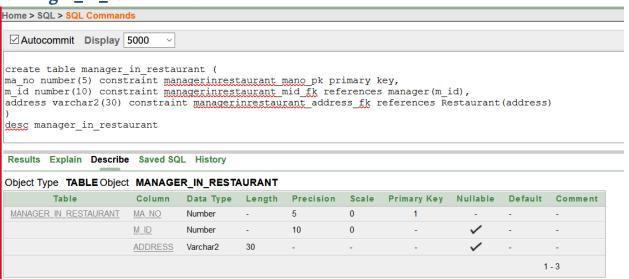
Item_order_info



Order_manager

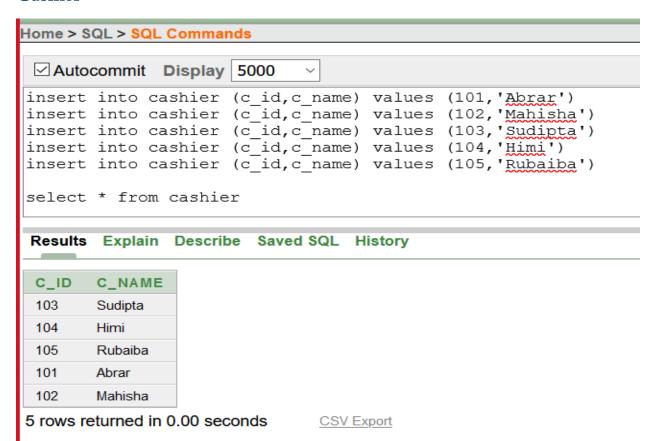


Manager_in_Restaurant

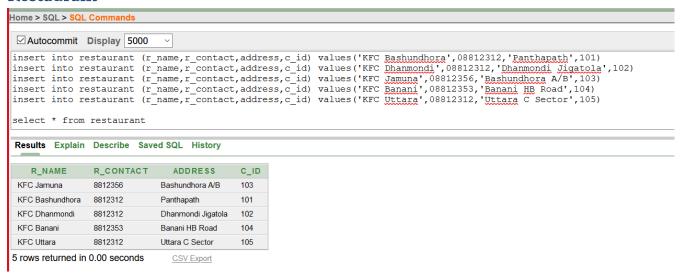


Data Insertion

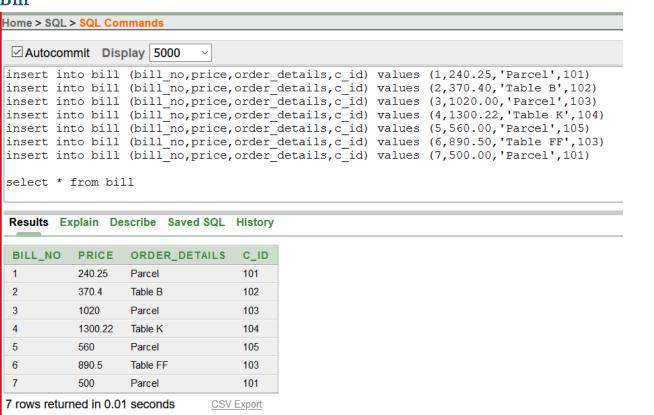
Cashier



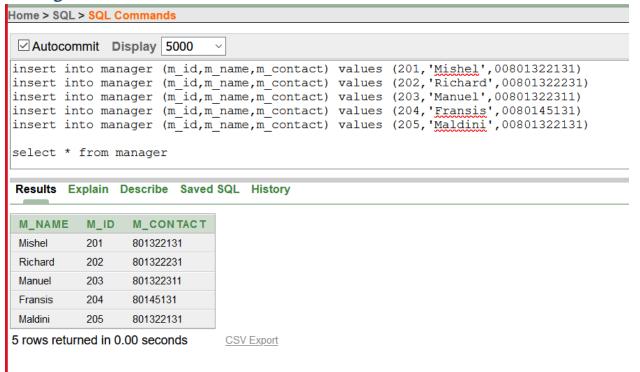
Restaurant



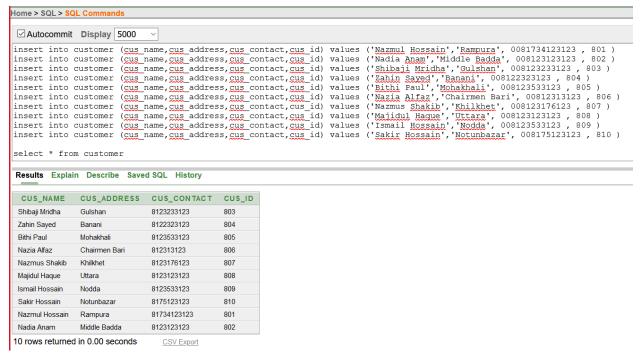
Bill



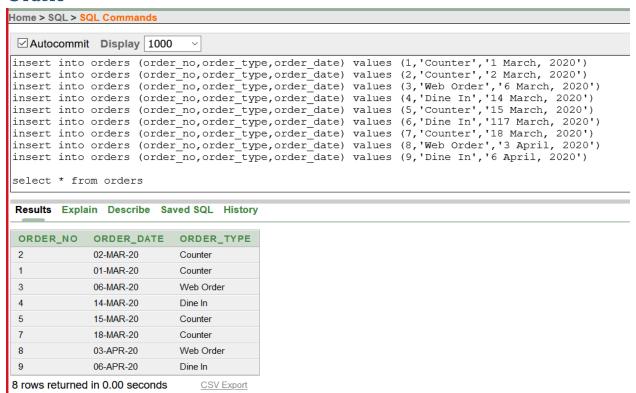
Manager



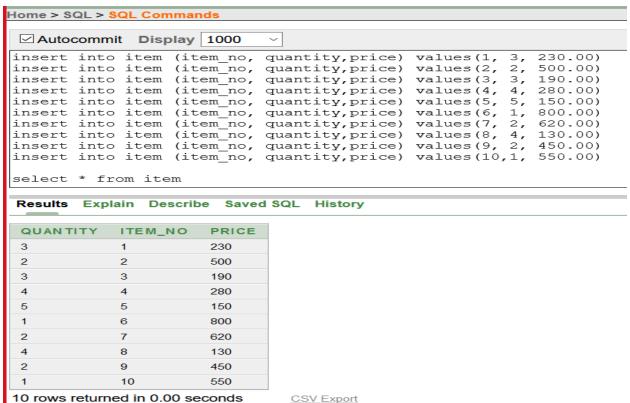
Customer



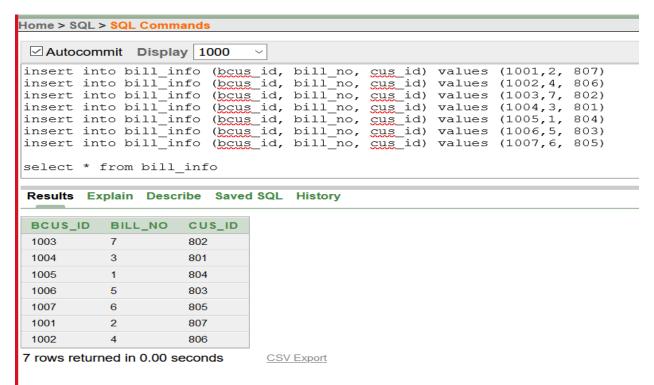
Orders



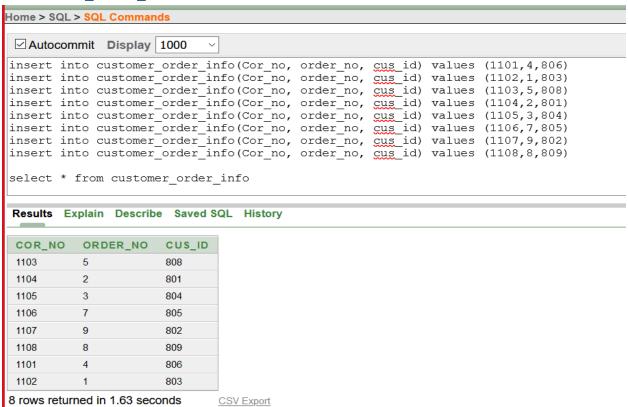
Item



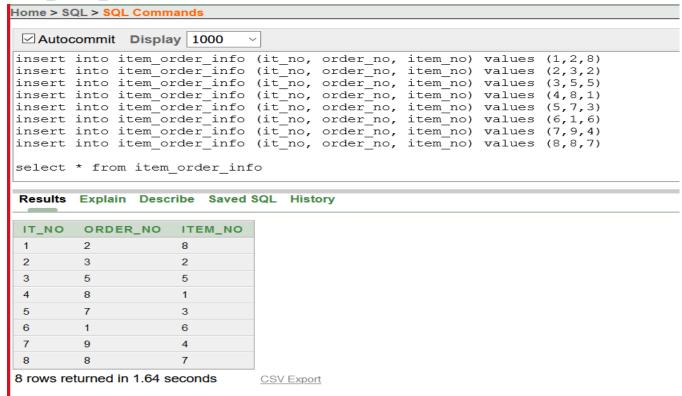
Bill_info



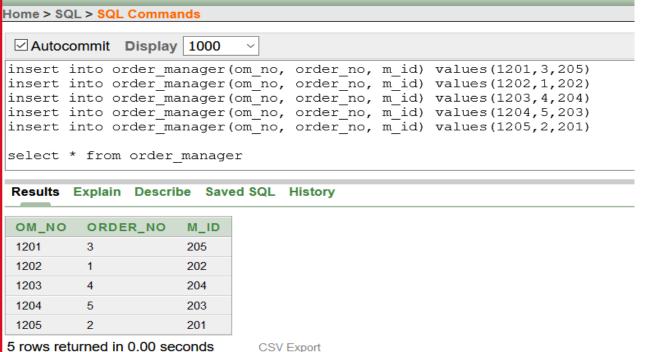
Customer_order_info



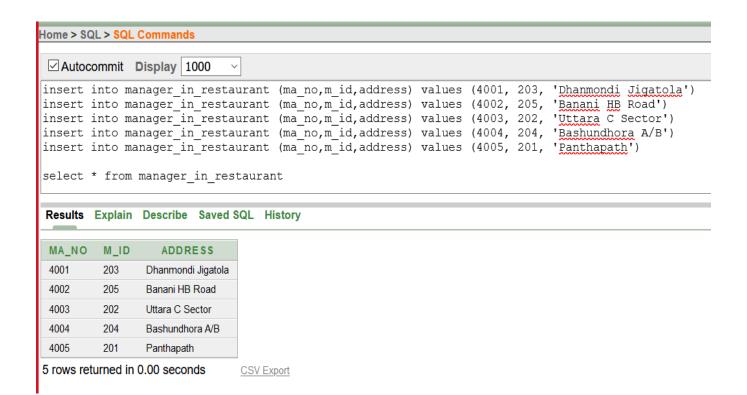
Item_order_info



Order_manager



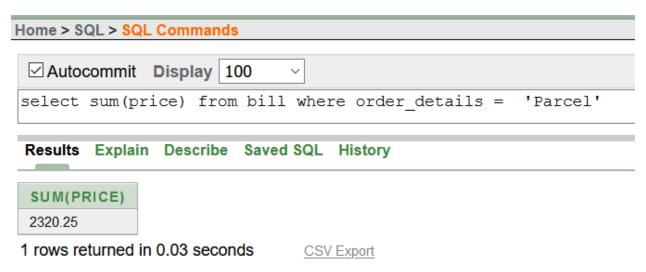
Manager_in_restaurant



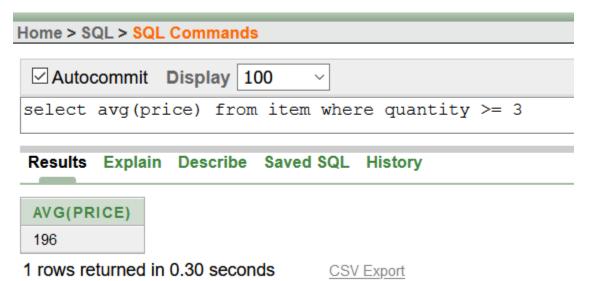
Query

Group Function

 Write a query and display the sum of the price of food which ordered for parcel.



 Write a query and display the average price of the item where quantity is equal or more than three.



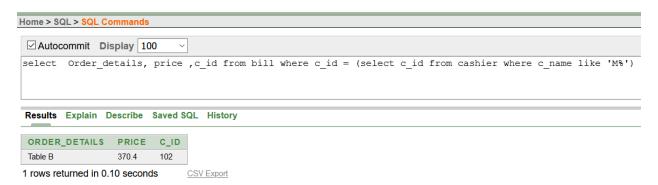
View

 Create a view and display that contains customer name, customer id, restaurant name and restaurant address.

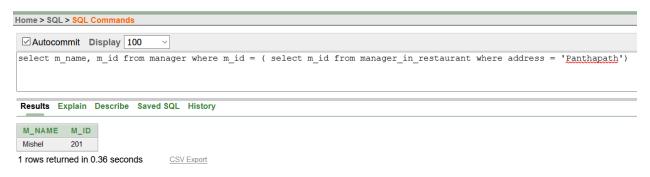


Subquery

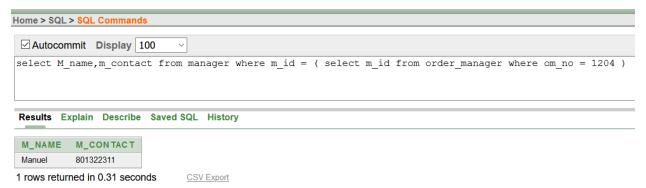
 Write a query and display Order details, price and customer id whose name start with 'M'.



• Write a query and display manager name, manager id who works in Panthapath branch.

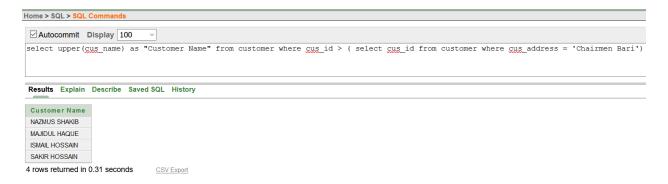


 Write a query and display manager name, manager contact whose om_no 1204.



Single row function

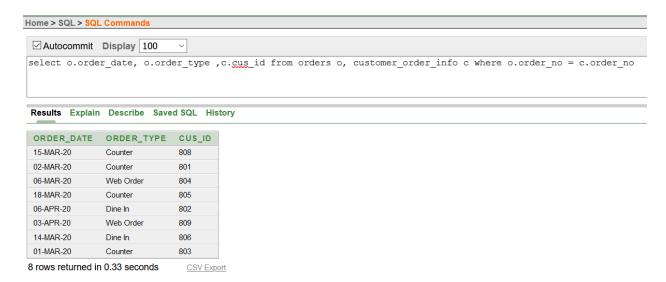
 Write a query and display all the customer name in upper case whose customer id is greater than the customer name of the 'Chairman Bari' Branch.



Joining

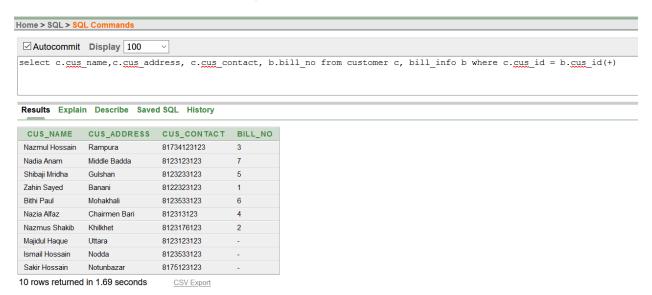
Equijoin

• Write a query and display order date, order type and customer id.



➤ Outer Join

 Write a query and display all the customer name, customer address, customer contact and bill no.



➤ Self Join

 Write a query and display customer name and address by joining them

