The Foot Shop-Online Shoe Store

BAN 610 Database Mgmt. & Applications

Guided by Prof. Yuanyuan Gao

Group No: 03

Group Members: Ajay Kumar Rath,

Yash Alpesh Shah,

Bhavish Koul,

Sagar Jethwa

Contents

General Description 3
Business Requirements: 3
Entity Relationship Diagram: 4
Logical Relationship Model: 5
Implementation in My SQL: 5
Data Manipulation on Database: 29

General Description

Shoe Company is a retail footwear apparel establishment and are planning to expand their business to large Scale as a company and add a website for user-end business. Also, expect to catch regular loyal based customer as company plans to build a strong market position.

To keep a track of employees, customers, appointments and payments, the company has been using spreadsheets and logbooks. Due to non-existence of a database, it is quite cumbersome to note services, customer requirement. Hence, to obtain a 360-degree view of the business, Shoe Company aims to establish a database for tracking the overall activities which helps them to grow their business.

The database also maintains the record of the all the products and all customer-based business activities which includes Orders, Deliveries, Issues etc.

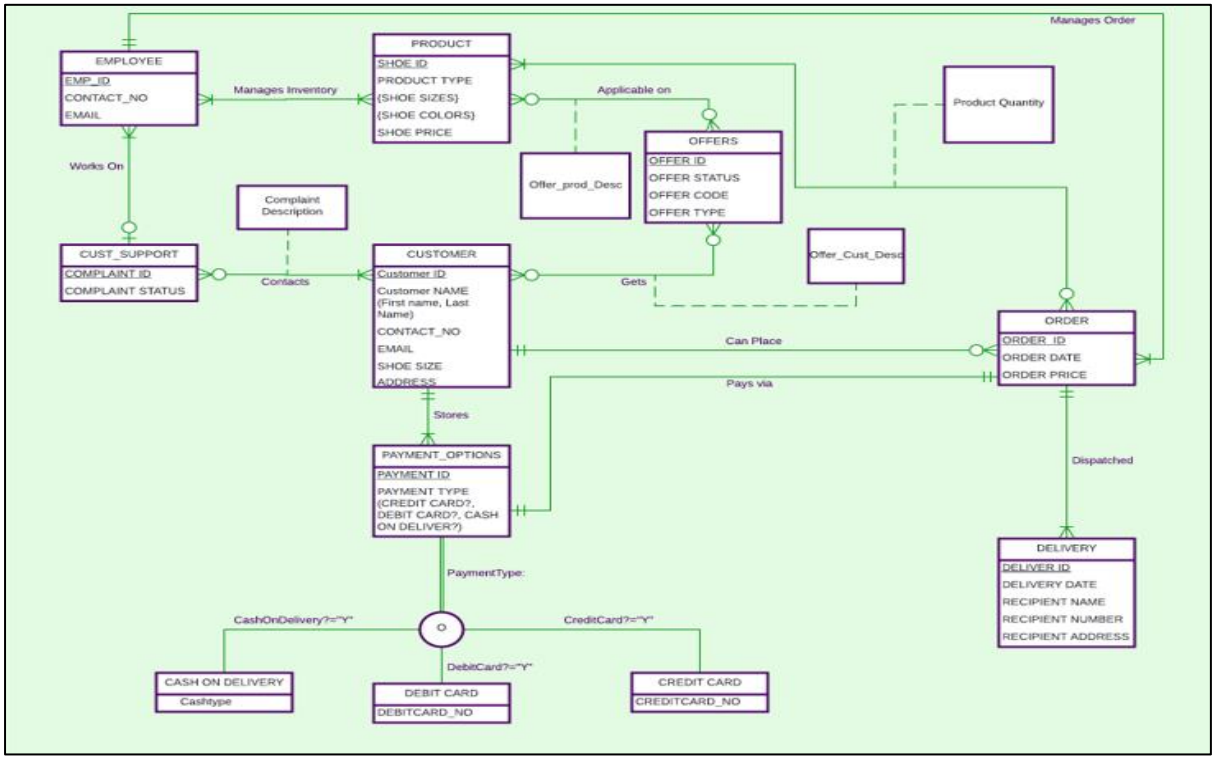
Business Requirements:

- Customer has Customer_ID as identifier and has other attributes i.e., Name which is a composite attribute having First Name and Last Name, Contact no, Email, Shoe Size and Address.
- Order has order_id as identifier and has Order Date, order price. A customer can have none or multiple orders. An order must belong to a customer.
- Product table has Product_id as identifier and has other attributes i.e., Product type, shoes size's, color's, price. An order can have multiple or at least one product. A product may be ordered multiple or zero times.
- Offers table has offer_id as identifier, other attributes are offer status, offer code, offer type. A product may have multiple, or none offers. A customer may get none or multiple offers. An offer may be applicable to none or multiple products and customers.
- Payment Option table consists of payment_id as identifier and has payment types. Customer may store one or multiple payment options. Different payment options are available to all customers. Payment type consists of COD, Debit card, Credit card.
- Employee manages order and product. Employee has employee_id as identifier and has contact-no, email. An employee manages multiple orders, and an order is managed by only one employee. Product can be

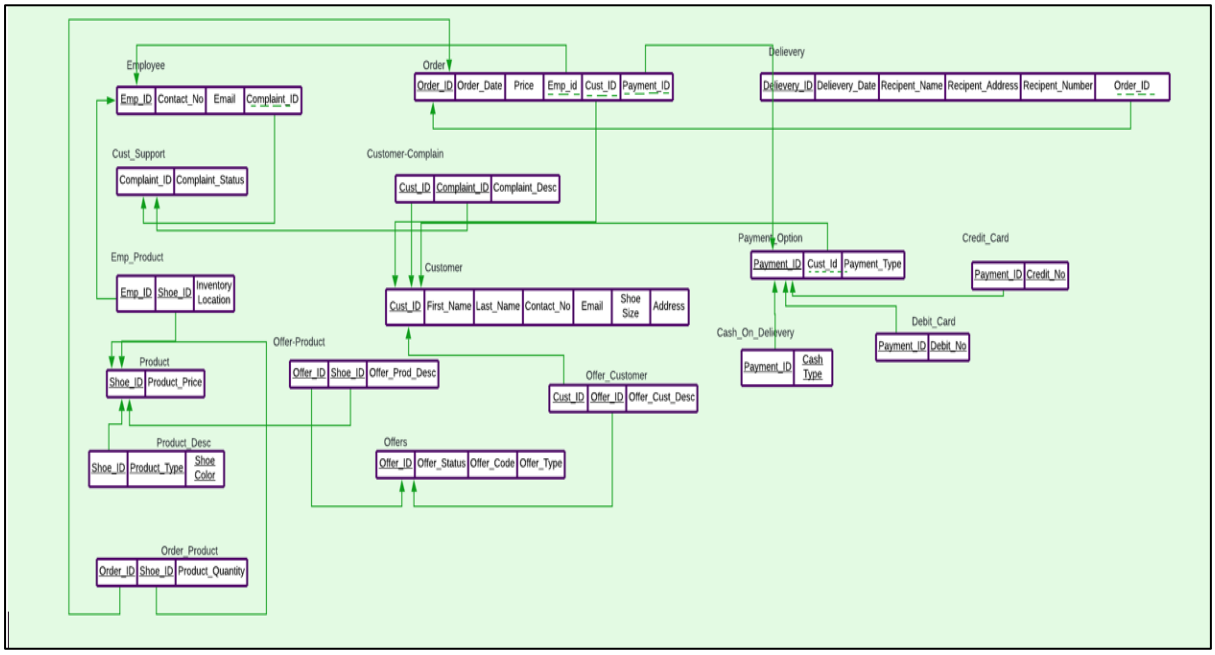
managed by multiple employees and an employee can manage multiple products.

- For any issues related to orders or products customers can contact customer support. Complaint ID is the identifier and has status as field. A customer may have none or multiple complains. Customer support may contact one or multiple customers. Customer support consists of one or more employees and one employee may or may not be working for customer support.
- Delivery table has delivery_id as identifier and has date, name, number, address. An order has one delivery address. Multiple orders are delivered to different customers.

Entity Relationship Diagram:



Logical Relationship Model:



Implementation in My SQL:

Creation of Database and Tables in My SQL

/* Create Database online_shoe_store */

CREATE DATABASE Online_Shoe_Store_Project_Group3;

/* Use Current Database */

USE Online_Shoe_Store_Project_Group3;

/* Create table customer */

```
CREATE TABLE Customer_T (
  Customer_ID int(11) NOT NULL AUTO_INCREMENT,
  First_Name varchar(30) NOT NULL,
  Last_Name varchar(30) NOT NULL,
  Contact_No bigint(11) NOT NULL,
  Email varchar(30) NOT NULL,
  Shoe_Size int(11) NOT NULL,
  Address varchar(30) NOT NULL,
  CONSTRAINT Customer_pk PRIMARY KEY (Customer_ID)
);
```

/* Create table payment_option */

```
CREATE TABLE Payment_Option_T (
Payment_ID int(11) NOT NULL AUTO_INCREMENT,
Customer_ID int(11) NOT NULL,
Payment_Type Varchar(20) NOT NULL,
CONSTRAINT payment_option_pk PRIMARY KEY (payment_ID),
CONSTRAINT payment_option_fk FOREIGN KEY (Customer_ID)
REFERENCES Customer_T (Customer_ID)
);
```

/* Create table Cash_on_delivery */

CREATE TABLE Cash_on_delivery_T (

Payment_ID int(11) NOT NULL,

Cash_type varchar(30) NOT NULL,

constraint Cash_on_delivery_pk primary key(Payment_ID,Cash_type),

CONSTRAINT Cash_on_delivery_fk FOREIGN KEY (payment_ID) REFERENCES Payment_Option_T (Payment_ID));

/* Create table Debit_CArd */

CREATE TABLE Debit_Card_T (

Payment_ID int(11) not null,

Debit_No bigint(11) NOT NULL,

constraint Debit_Card_pk primary key(Payment_ID,Debit_No),

CONSTRAINT Debit_Card_fk FOREIGN KEY (payment_ID) REFERENCES Payment_Option_T (Payment_ID)

);

/* Create table Credit_CArd */

CREATE TABLE Credit_Card_T (

Payment_ID int(11) not null,

Credit_no bigint(11) NOT NULL,

constraint Credit_Card_pk primary key(Payment_ID,Credit_no),

CONSTRAINT Credit_Card_fk FOREIGN KEY (payment_ID) REFERENCES Payment_option_T (Payment_ID)

);

/* Create table offers */

CREATE TABLE Offers_T (

Offer_ID int(11) NOT NULL AUTO_INCREMENT,

Offer_Status Varchar(30) NOT NULL,

Offer_Code int(11) NOT NULL,

Offer_Type Varchar(30),

CONSTRAINT offers_pk PRIMARY KEY (offer_ID)

);

/* create table offer_cust */

CREATE TABLE offer_Cust_T (

Customer_ID int(11) not null,

Offer_ID int(11) not null,

Offer_Cust_Desc Varchar(30) ,

CONSTRAINT offer_cust_pk PRIMARY KEY (Customer_ID, Offer_ID),

CONSTRAINT offer_cust_fk1 FOREIGN KEY (Customer_ID) REFERENCES Customer_T (Customer_ID),

CONSTRAINT offer_cust_fk2 FOREIGN KEY (Offer_ID) REFERENCES Offers_T (Offer_ID)

);

/* Create Table Product */

CREATE TABLE product_T (

Shoe_ID int(11) NOT NULL AUTO_INCREMENT,

Product_price int(11) NOT NULL,

CONSTRAINT product_pk PRIMARY KEY (Shoe_ID)

);

/* Create table offer_product */

CREATE TABLE Offer_product_T (

Offer_ID int(11) not null,

Shoe_ID int(11) not null,

Offer_product_Desc varchar(30),

CONSTRAINT Offer_product_pk PRIMARY KEY (Offer_ID, Shoe_ID),

CONSTRAINT Offer_product_fk1 FOREIGN KEY (Offer_ID) REFERENCES Offers_T (offer_ID),

CONSTRAINT Offer_product_fk2 FOREIGN KEY (Shoe_ID) REFERENCES product_T (shoe_ID)

);

/* Create table Cust_support */

CREATE TABLE Cust_Support_T (

Complaint_ID int(11) NOT NULL AUTO_INCREMENT,

Complaint_Status varchar(30),

CONSTRAINT Cust_Support_pk PRIMARY KEY (Complaint_ID)

);

/* Create table Employee */

CREATE TABLE Employee_T (

Employee_ID int(11) NOT NULL AUTO_INCREMENT,

Contact_No int(11) NOT NULL,

Email Varchar(30) NOT NULL,

Complaint_ID int(11) not null ,

CONSTRAINT Employee_pk PRIMARY KEY (Employee_ID),

CONSTRAINT Employee_fk FOREIGN KEY (Complaint_ID) REFERENCES Cust_Support_T (Complaint_ID)

);

/* create table Emp_product */

CREATE TABLE Emp_Product_T (

Employee_ID int(11) not null,

Shoe_ID Int(11) not null,

Inventory_Location Varchar(30) not null,

CONSTRAINT Emp_Product_pk PRIMARY KEY (Employee_ID, Shoe_ID),

CONSTRAINT Emp_Product_fk1 FOREIGN KEY (Employee_ID) REFERENCES Employee_T (Employee_ID),

CONSTRAINT Emp_Product_fk2 FOREIGN KEY (Shoe_ID) REFERENCES product_T (Shoe_ID)

);

/* create table customer_complain */

CREATE TABLE Customer_Complain_T (

Customer_ID int(11) not null,

Complaint_ID int(11) not null,

Complaint_Desc Varchar(30) not null,

CONSTRAINT Customer_Complain_pk PRIMARY KEY (Customer_ID, Complaint_ID),

CONSTRAINT Customer_Complain_fk1 FOREIGN KEY (Customer_ID) REFERENCES Customer_T (Customer_ID),

CONSTRAINT Customer_Complain_fk2 FOREIGN KEY (Complaint_ID) REFERENCES Cust_Support_T (Complaint_ID)

);

/* Create table orders */

CREATE TABLE Order_T (

Order_ID int(11) NOT NULL AUTO_INCREMENT,

Order_date date NOT NULL,

Price Double NOT NULL,

Employee_ID int(11) not null,

Customer_ID int(11) not null,

Payment_ID int(11) not null,

CONSTRAINT order_pk PRIMARY KEY (order_ID),

CONSTRAINT Order_fk1 FOREIGN KEY (Employee_ID) REFERENCES Employee_T (Employee_ID),

CONSTRAINT Order_fk2 FOREIGN KEY (Customer_ID) REFERENCES Customer_T (Customer_ID),

CONSTRAINT Order_fk3 FOREIGN KEY (Payment_ID) REFERENCES Payment_Option_T (Payment_ID));

/* Create table Order_product */

CREATE TABLE Order_product_T (

Order_ID int(11) not null,

shoe_ID int(11) not null,

Product_Quantity int(11) not null,

CONSTRAINT Order_product_pk PRIMARY KEY (order_ID, Shoe_ID),

CONSTRAINT Order_product_fk1 FOREIGN KEY (Order_ID) REFERENCES Order_T (Order_ID),

CONSTRAINT Order_product_fk2 FOREIGN KEY (Shoe_ID) REFERENCES Product_T (Shoe_ID)

);

/* Create table delivery */

CREATE TABLE Delivery_T (

Delivery_ID int(11) NOT NULL AUTO_INCREMENT,

Delivery_Date date NOT NULL,

Receipent_Name Varchar(30) NOT NULL,

Receipent_Address VArchar(30) NOT NULL,

Receipent_Number bigint(11) NOT NULL,

Order_ID int(11) not null,

CONSTRAINT Delivery_pk PRIMARY KEY (Delivery_ID),

CONSTRAINT Delivery_fk FOREIGN KEY (order_ID) REFERENCES Order_T (order_ID)

);

/* Create table product_desc */

CREATE TABLE product_desc_T (

Shoe_ID int(11) not null,

Product_type varchar(30) not null,

Shoe_color varchar(30) not null,

CONSTRAINT product_desc_pk PRIMARY KEY (Shoe_ID, Product_type, shoe_color),

CONSTRAINT product_desc_fk FOREIGN KEY (shoe_ID) REFERENCES product_T (shoe_ID)

);

Metadata for All 17 tables implemented

Table Name	**Customer_T**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Customer_ID	int	11	Yes	No	Primary_Key	
First Name	varchar	30	No	No		
Last Name	varchar	30	No	No		
Contact_No	bigint	11	No	No		
Email	varchar	30	No	No		
Shoe Size	int	11	No	No		
Address	varchar	30	No	No		
Table Name	**Payment_Option_T**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Payment_ID	int	11	Yes	No	Primary_Key	
Customer_ID	int	11	No	No	Foreign Key	Customer_T
Payment_Type	varchar	30	No	No		
Table Name	**Cash_on_Delievery**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Payment_ID	int	11	No	No	Primary_Key & Foreign Key	Payment_Option_T
Cash_type	varchar	30	No	No	Primary_Key	
Table Name	**Debit Card**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Payment_ID	int	11	No	No	Primary_Key & Foreign Key	Payment_Option_T
Debit_No	bigint	11	No	No	Primary_Key	
Table Name	**Credit Card**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Payment_ID	int	11	No	No	Primary_Key & Foreign Key	Payment_Option_T

Credit_No	bigint	11	No	No	Primary_Key	
Table Name	**Offers_T**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Offer_ID	int	11	Yes	No	Primary_Key	
Offer_Status	varchar	30	No	No		
Offer_Code	varchar	30	No	No		
Offer_Type	varchar	30	No	Yes		
Table Name	**Offer_Cust_T**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Customer_ID	int	11	No	No	Primary_Key & Foreign Key	Customer_T
Offer_ID	int	11	No	No	Primary_Key & Foreign Key	Offer_T
Offer_Cust_Desc	varchar	30	No	Yes		
Table Name	**Product_T**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Shoe_ID	int	11	Yes	No	Primary_Key	
Product_Price	int	11	No	No		
Table Name	**Offer_Product_T**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Offer_ID	int	11	No	No	Primary_Key & Foreign Key	Offer_T
Shoe_ID	int	11	No	No	Primary_Key & Foreign Key	Product_T
Offer_Product_Desc	varchar	30	No	Yes		
Table Name	**Cust_Support_T**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Complaint_ID	int	11	yes	no	Primary_Key	
Complaint_Status	varchar	30	No	yes		
Table Name	**Employee_T**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Employee_ID	int	11	yes	no	Primary_Key	
Contact_No	bigint	11	No	no		
Email	varchar	30	No	no		
Complaint_ID	int	11	No	no	Foreign Key	Cust_Support_T
Table Name	**Emp_Product_T**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Employee_ID	int	11	No	no	Primary_Key & Foreign Key	Employee_T
Shoe_ID	int	11	No	no	Primary_Key & Foreign Key	Product_T
Inventory_Location	varchar	30	No	no		
Table Name	**Custmer_Complain_T**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Customer_ID	int	11	No	no	Primary_Key & Foreign Key	Customer_T
Complain_ID	int	11	No	no	Primary_Key & Foreign Key	Cust_Support_T
Complain_desc	varchar	30	No	no		
Table Name	**Order_T**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Order_ID	int	11	Yes	no	Primary_Key	
Order_date	date		No	no		
Price	Double		No	no		

Employee_ID	int	11	No	no	Foreign Key	Employee_T
Customer_ID	int	11	No	no	Foreign Key	Customer_T
Payment_ID	int	11	No	no	Foreign Key	Payment_Option_T
Table Name	**Order_product_T**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Order_ID	int	11	No	no	Primary_Key & Foreign Key	order_T
Shoe_ID	int	11	No	no	Primary_Key & Foreign Key	Product_T
Product_Quantity	int	11	No	no		
Table Name	**Delivery_T**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Delivery_ID	int	11	yes	no	Primary_Key	
Delivery_Date	date		No	no		
Receipent_Name	varchar	30	No	no		
Receipent_Address	varchar	30	No	no		
Receipent_Number	bigint	11	No	no		
Order_ID	int	11	No	no	Foreign Key	order_T
Table Name	**Product_desc_T**					
Attribute	**Data Type**	**Size**	**Auto**	**Null**	**Constraint**	**References**
Shoe_ID	int	11	No	no	Primary_Key	
Product_type	varchar	30	No	no	Primary_Key	
Shoe_color	varchar	30	No	no	Primary_Key & Foreign Key	Product_T

Inserting Data into tables

INSERT into Customer_T(Customer_ID, First_name, Last_Name, Address, Shoe_Size, Contact_No, email)

Values

(1, 'Ashish', 'Nehra', '100 SW ST 97201', 12, 7609947483, 'ashishnehra@gmail.com'),

(2, 'Virendra', 'Sehwag', '86 Union City 94587', 11, 8015295125,'virendra.sehwag@gmail.com'),

(3, 'Saurav ','Ganguly', '10 NW ST 97205', 12, 2035006370, 'saurav.ganguly@gmail.com'),

(4, 'Mahendra Singh', 'Dhoni', '100 Union ST 97251', 11, 6154817037, 'ms.dhoni@gmail.com'),

(5, 'Suresh', 'Raina', '33 Mission Blvd 95687', 9, 7608440455, 'suresh.raina@gmail.com'),

(6, 'Rohit', 'Sharma', '854 Avocado Ave 10005', 10, 0491570006, 'rohit.sharma@gmail.com'),

(7, 'Virat', 'Kohli', '453 Lodha Aqua Delhi', 9, 0491570156, 'virat.kohli@gmail.com'),

(8, 'Yuzvendra', 'Chahal', '90 Bhayandar 401101', 8, 9876675544, 'yuzi.chahal@gmail.com'),

(9, 'Yuvraj', 'Singh', '301 Bharat 400097', 9, 4086752323, 'yuvraj.sigh@gmail.com'),

(10, 'Robin', 'Uthhapa', '1005 Riverside 400063', 10, 7744335772, 'robin.utthappa@gmail.com'),

(11, 'Umesh', 'Yadav', '100 Fremont 97568', 13, 4089207898, 'umesh.yadav@gmail.com'),

(12, 'Kuldeep', 'Yadav', '94 AMD ST 97265', 9, 6753345237, 'kuldeep.yadav@gmail.com'),

(13, 'Shikhar', 'Dhawan', '4750 Central Hourbour 33356', 10, 4086752323, 'shikhar.dhawan@gmail.com'),

(14, 'Ravindra', 'Jadeja', '22 Sunny ST 45620', 9, 0491578888, 'ravindra.jadeja@gmail.com'),

(15, 'Ravi', 'Ashwin', '152 SW ST 97201', 10, 2087654422, 'ravi.ashwin@gmail.com'),

(16, 'Navdeep', 'Saini', '103 Fremont 97568', 11, 7865643423, 'navdeep.saini@gmail.com'),

(17, 'Mohammed', 'Siraj', '650 SW ST 97205', 10, 0491579212, 'mohammed.siraj@gmail.com'),

(18, 'S', 'Sreesant', '100 Union Sq 94587', 11, 0491578957, 's.sreesant@gmail.com'),

(19, 'Zaheer', 'Khan', '1020 Mission BLVD 94586', 12, 9876675544, 'zaheer.khan@gmail.com'),

(20, 'Sachin', 'Tendulkar', '63 People ST 45612', 8, 6756348709, 'sachin.tendulkar@gmail.com');

*select * from customer_t;*

insert Payment_Option_T (payment_id, customer_id, Payment_type) values

(1,1,'Credit'),

(2,2, 'Debit'),

(3,3, 'Credit'),

(4,4, 'Credit'),

(5,5, 'Debit'),

(6,6, 'Credit'),

(7,7, 'Credit'),

(8,8, 'Debit'),

(9,9, 'Credit'),

(10,10, 'Credit'),

(11,11, 'Credit'),

(12,12, 'Credit'),

(13,13, 'Credit'),

(14,14, 'Credit'),

(15,15, 'Debit'),

(16,16, 'Credit'),

(17,17, 'Debit'),

(18,18, 'Credit'),

(19,19, 'Credit'),

(20,20, 'Debit');

insert cash_on_delivery_t(Payment_id,Cash_type) values

(1,'USD'),

(2, 'INR'),

(3, 'Euro'),

(4, 'Pound'),

(5, 'INR'),

(6, 'AUSD'),

(7, 'YEN'),

(8, 'INR'),

(9, 'USD'),

(10, 'Euro'),

(11, 'GBP'),

(12, 'Pound'),

(13, 'INR'),

(14, 'Dinar'),

(15, 'CAD'),

(16, 'INR'),

(17, 'Euro'),

(18, 'CAD'),

(19, 'USD'),

(20, 'YEN'),

(1, 'INR'),

(2, 'USD'),

(20, 'INR'),

(14, 'USD'),

(5, 'YEN');

ALTER TABLE DEBIT_CARD_T MODIFY DEBIT_NO BIGINT;

insert Debit_Card_T (payment_id,Debit_No) values

(2, 2345678912),

(5, 4567890123),

(8, 5678901234),

(15, 6789012345),

(17, 7890123456),

(20, 8901234567);

ALTER TABLE CREDIT_CARD_T MODIFY CREDIT_NO BIGINT;

insert Credit_Card_T (payment_id, Credit_No) values

(1,1029384756),

(3, 2938475610),

(4, 3847561029),

(6, 4756102938),

(7, 6574839201),

(9, 7483920165),

(10, 8392017465),

(11, 9201837465),

(12, 9078563412),

(13, 1324576809),

(14, 9087654321),

(16, 2314567890),

(18, 7865492013),

(19, 4253617890);

ALTER TABLE offers_t MODIFY offer_code varchar(30);

Insert into offers_t(offer_id, offer_status, offer_code, offer_type) values

(101,'Active', 'NEW25' , 'New Comer'),

(102, 'Expired', 'NEW30' , 'New Comer '),

(103, 'Active', 'SHOE50' , 'Promotional'),

(104, 'Active', 'BOGO' , 'Seasonal'),

(105, 'Active', 'SHOE40' , 'Promotional '),

(106, 'Active', 'NEW40 ' , 'New Comer '),

(107, 'Expired', 'SHOE20 ' , 'Promotional '),

(108, 'Active', 'NIKE15' , 'Brand'),

(109, 'Active', 'NEW30 ' , 'New Comer '),

(110, 'Active', 'MYSHOES15' , 'Promotional'),

(111, 'Expired', 'SHOE40 ' , 'Promotional '),

(112, 'Active', 'B2G3' , 'Seasonal '),

(113, 'Active', 'NEW30' , 'New Comer '),

(114, 'Expired', 'B1G1' , 'Seasonal '),

(115, 'Active', 'SHOE40' , 'Promotional '),

(116, 'Expired', 'B3G5' , 'Seasonal '),

(117, 'Active', 'SHOE20 ' , 'Promotional'),

(118, 'Active', 'ADI25' , 'Brand'),

(119, 'Active', 'SK25' , 'Brand'),

(120, 'Active', 'SHOE40 ' , 'Promotional');

Insert into Offer_Cust_T(Customer_id, Offer_id, Offer_Cust_Desc) values

(1,101, 'New Registration'),

(2,102, 'New Registration'),

(3,101, 'New Registration'),

(4,104, 'Seasonal'),

(5,105, 'Frequent Buyer'),

(6,106, 'New Registration'),

(7,107, 'Frequent Buyer'),

(8,108, 'Frequent Buyer for this brand'),

(9,109, 'New Registration'),

(10,110, 'Frequent Buyer'),

(11,111, 'Frequent Buyer'),

(12,112, 'Seasonal'),

(13,113, 'New Registration'),

(14,114, 'Seasonal'),

(15,115, 'Frequent Buyer'),

(16,116, 'Seasonal'),

(17,117, 'Frequent Buyer'),

(18,118, 'Frequent Buyer for brand'),

(19,119, 'Frequent Buyer for Brand'),

(20,120, 'Frequent Buyer'),

(1,110, 'Frequent Buyer'),

(2,112, 'Seasonal'),

(3,103, 'Frequent Buyer'),

(7,104, 'Seasonal'),

(5,114, 'Seasonal');

Insert into Product_T (Shoe_ID, Product_price) values

(1001, 59),

(1002, 149),

(1003, 120),

(1004, 39),

(1005, 79),

(1006, 159),

(1007, 99),

(1008, 69),

(1009, 99),

(1010, 109),

(1011, 110),

(1012, 109),

(1013, 100),

(1014, 120),

(1015, 249),

(1016, 199),

(1017, 250),

(1018, 300),

(1019, 500),

(1020, 449);

insert Cust_Support_T (Complaint_id,Complaint_status) values

(001,'Resolved'),

(002, 'Resolved'),

(003,'Resolved'),

(004,'Resolved'),

(005, 'Resolved'),

(006, 'Resolved'),

(007, 'Resolved'),

(008, 'Resolved'),

(009, 'Resolved'),

(010,'In Process'),

(011, 'In Process'),

(012, 'In Process'),

(013, 'In Process'),

(014,' In Process'),

(015,' In Process'),

(016,' In Process'),

(017, 'In Process'),

(018,'Initiated'),

(019, 'Initiated'),

(020,'Initiated');

Insert into Offer_product_t (shoe_id, offer_id, offer_product_desc) values

(1001, 101, 'Only for New user'),

(1002, 102, 'Only for New user'),

(1003, 103, 'For Frequent Buyers Only'),

(1004, 104, 'Valid for Summer'),

(1005, 105, 'For Frequent Buyers Only'),

(1006, 106, 'Only for New user'),

(1007, 107, 'For Frequent Buyers Only'),

(1008, 108, 'Preferred this brand'),

(1009, 109, 'Only for New user'),

(1010, 110, 'For Frequent Buyers Only'),

(1011, 111, 'For Frequent Buyers Only'),

(1012, 112, 'Valid for SPRING'),

(1013, 113, 'Only for New user'),

(1014, 114, 'Valid for Winter'),

(1015, 115, 'For Frequent Buyers Only'),

(1016, 116, 'Valid for Summer'),

(1017, 117, 'For Frequent Buyers Only'),

(1018, 118, 'Preferred this brand'),

(1019, 119, 'Preferred this brand'),

(1020, 120, 'For Frequent Buyers Only');

ALTER TABLE EMPLOYEE_T MODIFY Contact_No bigint;

Insert into Employee_T(Employee_id, Email, Contact_No, Complaint_Id) values

(9001, 'Karen.Miller@gmail.com ', 487567243, 001),

(9002, 'David.Noid@gmail.com ', 9807653242, 002),

(9003, 'Mike.tyson@gmail.com ', 9875641234, 003),

(9004, 'Rooney.Bold@gmail.com ', 7865364573, 004),

(9005, 'Amber.Bonny@gmail.com ', 6547890098, 005),

(9006, 'Jeniffer.Roll@gmail.com ', 763451234, 006),

(9007, 'John.Bill@gmail.com ', 5674351234, 007),

(9008, 'You.Hill@gmail.com ', 9087654422, 008),

(9009, 'Ross.Baker@gmail.com ', 6765567262, 009),

(9010, 'Karan.johar@gmail.com ', 7744335772, 010),

(9011, 'Salman.Khan@gmail.com ', 4089907898, 011),

(9012, 'Larry.lee@gmail.com ', 6753345237, 012),

(9013, 'Daniel.Klen@gmail.com ', 8907654535, 013),

(9014, 'Krish.Kohar@gmail.com ', 8907654356, 014),

(9015, 'Amy.Flen@gmail.com ', 7865643423, 015),

(9016, 'Baker.Bon@gmail.com ', 9087876677, 016),

(9017, 'Chold.Voker@gmail.com ', 6754563355, 017),

(9018, 'Amy.Ambekar@gmail.com ', 9876675544, 018),

(9019, 'kool.Kamer@gmail.com ', 6756348709, 019),

(9020, 'Brandon.Board@gmail.com', 4086752323, 020);

Insert into Emp_Product_T(Employee_Id, Shoe_id, Inventory_Location) values

(9001, 1001, 'CA'),

(9002, 1002, 'TX'),

(9003, 1003, 'TX'),

(9004, 1004, 'AZ'),

(9005, 1005, 'NY'),

(9006, 1006, 'OR'),

(9007, 1007, 'CA'),

(9008, 1008, 'CA'),

(9009, 1009, 'TX'),

(9010, 1010, 'NY'),

(9011, 1011, 'TX'),

(9012, 1012, 'CA'),

(9013, 1013, 'AZ'),

(9014, 1014, 'OR'),

(9015, 1015, 'AZ'),

(9016, 1016, 'OR'),

(9017, 1017, 'AZ'),

(9018, 1018, 'CA'),

(9019, 1019, 'NY'),

(9020, 1020, 'TX');

Insert into Customer_Complain_T(Customer_Id, Complaint_id, Complaint_desc)

Values

(1,001, 'Issue with soul quality'),

(2,002, 'Color Issue'),

(3,003, 'Size Issue'),

(4,004, 'Issue with soul quality'),

(1,005, 'Size Issue'),

(6,006, 'Pair Mismatch'),

(3,007, 'Color Issue'),

(8,008, 'Pair Mismatch'),

(9,009, 'Size Issue'),

(17,010, 'Size Issue'),

(17,011, 'Issue with soul quality'),

(12,012, 'Pair Mismatch'),

(13,013, 'Color Issue'),

(14,014, 'Size Issue'),

(15,015, 'Color Issue'),

(3,016, 'Issue with soul quality'),

(17,017, 'Pair Mismatch'),

(18,018, 'Size Issue'),

(19,019, 'Color Issue'),

(20,020, 'Pair Mismatch');

insert order_T(order_id,order_date,customer_id, price, employee_id, payment_id) values

(1,'2021-01-02',1, 59, 9001, 1),

(2,'2020-12-28',2, 149, 9002, 2),

(3,'2021-01-08',3, 120, 9003, 3),

(4,'2021-01-07',4, 39, 9004, 4),

(5,'2021-02-04',1, 79, 9005, 1),

(6,'2021-03-01',6, 159, 9006, 6),

(7,'2020-12-29',3, 99, 9007, 3),

(8,'2021-03-14',8, 69, 9008, 8),

(9,'2021-01-05',9, 198, 9009, 9),

(10,'2021-02-25',17, 220, 9010, 17),

(11,'2021-01-17',17, 240, 9011, 17),

(12,'2021-02-14',12, 109, 9012, 12),

(13,'2021-03-15',13, 200, 9013, 13),

(14,'2020-12-26',14, 249, 9014, 14),

(15,'2021-01-28',15, 99, 9015, 15),

(16,'2021-01-28',3, 198, 9016, 3),

(17,'2021-02-04',17, 39, 9017, 17),

(18,'2020-03-02',18, 200, 9005, 18),

(19,'2020-03-05',19, 99, 9001, 19),

(20,'2020-01-30',20, 100, 9003, 20);

Insert Into Order_product_t (shoe_id, order_id, product_quantity) values

(1001, 1, 1),

(1002, 2, 1),

(1003, 3, 1),

(1004, 4,1),

(1005, 5,1),

(1006, 6,2),

(1007, 7,1),

(1008, 8,1),

(1009, 9,2),

(1011, 10,1),

(1014, 11,1),

(1012, 12,1),

(1013, 13,2),

(1015, 14,1),

(1009, 15,1),

(1007, 16,2),

(1004, 17,1),

(1013, 18,2),

(1009, 19, 1),

(1013, 20, 1);

ALTER TABLE DELIVERY_T MODIFY RECEIPENT_NUMBER BIGINT;

INSERT INTO delivery_T (delivery_id, receipent_name, receipent_address, order_id, receipent_number, delivery_date)

VALUES

(1, 'Ashish Nehra', '100 SW ST 97201', 1, 7609947483, '2021-01-05'),

(2, 'Virendra Sehwag', '86 Union City 94587', 2, 8015295125, '2021-01-03'),

(3, 'Saurav Ganguly', '10 NW ST 97205', 3, 2035006370, '2021-01-15'),

(4, 'Mahendra Singh Dhoni', '100 Union ST 97251', 4, 6154817037, '2021-01-10'),

(5, 'Ashish Nehra', '100 SW ST 97201', 5, 7609947483, '2021-02-08'),

(6, 'Rohit Sharma', '854 Avocado Ave 10005', 6, 0491570006, '2021-03-05'),

(7, 'Saurav Ganguly', '10 NW ST 97205', 7, 2035006370, '2021-01-02'),

(8, 'Yuzvendra Chahal', '90 Bhayandar 401101', 8, 9876675544, '2021-03-15'),

(9, 'Yuvraj Singh', '301 Bharat 400097', 9, 4086752323, '2021-01-06'),

(10, 'Mohammed Siraj', '650 SW ST 97205', 10, 0491579212, '2021-02-28'),

(11, 'Mohammed Siraj', '650 SW ST 97205', 11, 0491579212, '2021-01-18'),

(12, 'Kuldeep Yadav', '94 AMD ST 97265', 12, 6753345237, '2021-02-15'),

(13, 'Shikhar Dhawan', '4750 Central Hourbour 33356', 13, 4086752323, '2021-03-18'),

(14, 'Ravindra Jadeja', '22 Sunny ST 45620',14, 0491578888, '2020-12-29'),

(15, 'Ravi Ashwin', '152 SW ST 97201', 15, 2087654422, '2021-01-31'),

(16, 'Saurav Ganguly', '10 NW ST 97205', 16, 2035006370, '2021-01-29'),

(17, 'Mohammed Siraj', '650 SW ST 97205', 17, 0491579212, '2021-02-09'),

(18, 'S Sreesant', '100 Union Sq 94587', 18, 0491578957, '2020-03-02'),

(19, 'Zaheer Khan', '1020 Mission BLVD 94586', 19, 9876675544, '2020-03-05'),

(20, 'Sachin Tendulkar', '63 People ST 45612', 20, 6756348709, '2020-01-31');

Insert into product_desc_t(shoe_id, product_type, shoe_color)

VALUES

(1001,'Sneakers','Yellow'),

(1002,'Joggers','Green'),

(1003,'Casuals','Crimson'),

(1004,'Formals','Maroon'),

(1005,'Hiking','Black'),

(1006,'Urbanwear','Indigo'),

(1007,'Flipflops','Brown'),

(1008,'Sandals','Purple'),

(1009,'Running Shoes','Green'),

(1010,'Boots','Gold'),

(1011,'Sneakers','Pink'),

(1012,'Joggers','Cyan'),

(1013,'Casuals','AquaBlue'),

(1014,'Formals','Military Green'),

(1015,'Hiking','Red'),

(1016,'Urbanwear','Orange'),

(1017,'Flipflops','Red-Black'),

(1018,'Sandals','Peach'),

(1019,'Running Shoes','Violet'),

(1020,'Boots','Blue-Black');

Data Manipulation on Database:

Query1: Displaying Customer_Name,Complain_id ,Complain_desc and Status of complain where issue is not resolved using equi Join.

select Customer_T.First_Name,Customer_T.Last_Name,Customer_Complain_T.Complaint_id,Customer_Complain_T.Complaint_desc,Cust_Support_T.Complaint_status

from Customer_T,Customer_Complain_T,Cust_Support_T

where Customer_T.Customer_ID=Customer_Complain_T.Customer_ID and Customer_Complain_T.Complaint_id=Cust_Support_T.Complaint_id

and Cust_Support_T.Complaint_status not in ('Resolved');

First_Name	Last_Name	Complaint_id	Complaint_desc	Complaint_status
Mohammed	Siraj	10	Size Issue	In Process
Mohammed	Siraj	11	Issue with soul quality	In Process
Kuldeep	Yadav	12	Pair Mismatch	In Process
Shikhar	Dhawan	13	Color Issue	In Process
Ravindra	Jadeja	14	Size Issue	In Process
Ravi	Ashwin	15	Color Issue	In Process
Saurav	Ganguly	16	Issue with soul quality	In Process
Mohammed	Siraj	17	Pair Mismatch	In Process
S	Sreesant	18	Size Issue	Initiated
Zaheer	Khan	19	Color Issue	Initiated
Sachin	Tendulkar	20	Pair Mismatch	Initiated

Query2: Displaying Product_id,Product_price and Order_id of all the product irrespective if they have been ordered or not (Use Left Join).

select product_t.Shoe_id,product_t.Product_price,order_product_t.Order_ID

from product_t

left join order_product_t

on product_t.Shoe_id=order_product_t.Shoe_id;

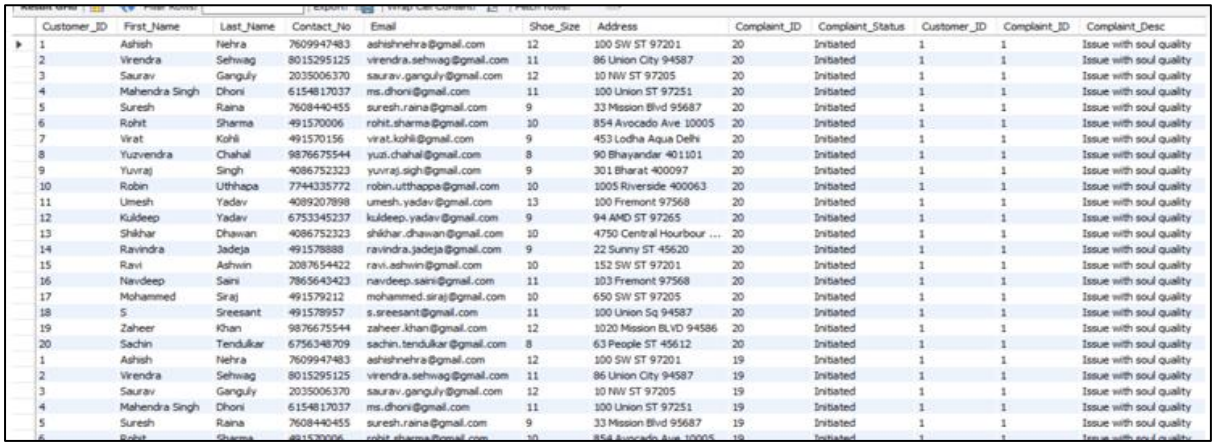
Result Grid | Filter Rows:

Shoe_id	Product_price	Order_ID
1001	59	1
1002	149	2
1003	120	3
1004	39	4
1004	39	17
1005	79	5
1006	159	6
1007	99	7
1007	99	16
1008	69	8
1009	99	9
1009	99	15
1009	99	19
1010	109	NULL
1011	110	10
1012	109	12
1013	100	13
1013	100	18
1013	100	20
1014	120	11
1015	249	14
1016	199	NULL
1017	250	NULL
1018	300	NULL
1019	500	NULL
1020	449	NULL

Query3: Display all records of Customer_T,Customer_Complain and Customer_Suppport using Cross Join

*select * from*

customer_T cross join cust_support_t cross join customer_complain_t;



Customer_ID	First_Name	Last_Name	Contact_No	Email	Shoe_Size	Address	Complaint_ID	Complaint_Status	Customer_ID	Complaint_ID	Complaint_Desc
1	Ashish	Nehra	7609947483	ashishnehra@gmail.com	12	100 SW ST 97201	20	Initiated	1	1	Issue with soul quality
2	Virendra	Sehwag	8015295125	virendra.sehwag@gmail.com	11	86 Union City 94587	20	Initiated	1	1	Issue with soul quality
3	Saurav	Ganguly	2035006370	saurav.ganguly@gmail.com	12	10 NW ST 97205	20	Initiated	1	1	Issue with soul quality
4	Mahendra Singh	Dhoni	6154817037	ms.dhoni@gmail.com	11	100 Union ST 97251	20	Initiated	1	1	Issue with soul quality
5	Suresh	Raina	7608440455	suresh.raina@gmail.com	9	33 Mission Blvd 95687	20	Initiated	1	1	Issue with soul quality
6	Rohit	Sharma	491570006	rohit.sharma@gmail.com	10	854 Avocado Ave 10005	20	Initiated	1	1	Issue with soul quality
7	Virat	Kohli	491570156	virat.kohli@gmail.com	9	453 Lodha Aqua Delhi	20	Initiated	1	1	Issue with soul quality
8	Yuzvendra	Chahal	9876675544	yuzi.chahal@gmail.com	8	90 Bhayandar 401101	20	Initiated	1	1	Issue with soul quality
9	Yuvraj	Singh	4086752323	yuvraj.sigh@gmail.com	9	301 Bharat 400097	20	Initiated	1	1	Issue with soul quality
10	Robin	Utthapa	7744335772	robin.utthappa@gmail.com	10	1005 Riverside 400063	20	Initiated	1	1	Issue with soul quality
11	Umesh	Yadav	4089207898	umesh.yadav@gmail.com	13	100 Fremont 97568	20	Initiated	1	1	Issue with soul quality
12	Kuldeep	Yadav	6753345237	kuldeep.yadav@gmail.com	9	94 AMD ST 97265	20	Initiated	1	1	Issue with soul quality
13	Shikhar	Dhawan	4086752323	shikhar.dhawan@gmail.com	10	4750 Central Hourbour ...	20	Initiated	1	1	Issue with soul quality
14	Ravindra	Jadeja	491578888	ravindra.jadeja@gmail.com	9	22 Sunny ST 45620	20	Initiated	1	1	Issue with soul quality
15	Ravi	Ashwin	2087654422	ravi.ashwin@gmail.com	10	152 SW ST 97201	20	Initiated	1	1	Issue with soul quality
16	Navdeep	Saini	7865643423	navdeep.saini@gmail.com	11	103 Fremont 97568	20	Initiated	1	1	Issue with soul quality
17	Mohammed	Siraj	491579212	mohammed.siraj@gmail.com	10	650 SW ST 97205	20	Initiated	1	1	Issue with soul quality
18	S	Sreesant	491578957	s.sreesant@gmail.com	11	100 Union Sq 94587	20	Initiated	1	1	Issue with soul quality
19	Zaheer	Khan	9876675544	zaheer.khan@gmail.com	12	1020 Mission BLVD 94586	20	Initiated	1	1	Issue with soul quality
20	Sachin	Tendulkar	6756348709	sachin.tendulkar@gmail.com	8	63 People ST 45612	20	Initiated	1	1	Issue with soul quality
1	Ashish	Nehra	7609947483	ashishnehra@gmail.com	12	100 SW ST 97201	19	Initiated	1	1	Issue with soul quality
2	Virendra	Sehwag	8015295125	virendra.sehwag@gmail.com	11	86 Union City 94587	19	Initiated	1	1	Issue with soul quality
3	Saurav	Ganguly	2035006370	saurav.ganguly@gmail.com	12	10 NW ST 97205	19	Initiated	1	1	Issue with soul quality
4	Mahendra Singh	Dhoni	6154817037	ms.dhoni@gmail.com	11	100 Union ST 97251	19	Initiated	1	1	Issue with soul quality
5	Suresh	Raina	7608440455	suresh.raina@gmail.com	9	33 Mission Blvd 95687	19	Initiated	1	1	Issue with soul quality

Query4: Use of Union

select Customer_ID from Customer_T UNION

select Customer_ID from order_t;

Result Grid

Customer_ID
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

select Customer_ID from Customer_T UNION All

select Customer_ID from order_t;

Result Grid

Customer_ID
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
1
1
2
3
3
3

Query5: List Employee Id from Employee and Order using intersect (Exists)

select Employee_ID

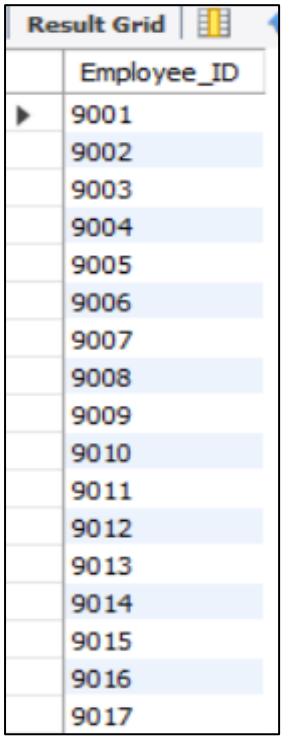
from employee_t

where exists

(select Employee_ID

from order_t

where order_t.Employee_ID=employee_t.Employee_ID);



Result Grid

Employee_ID
9001
9002
9003
9004
9005
9006
9007
9008
9009
9010
9011
9012
9013
9014
9015
9016
9017

Query6: Create a view with Product_id and Price whose Payment type is in Debit

create view prod_Debit_Sum as

(

select product_t.Shoe_ID,sum(product_t.Product_Price) as Product_Price

from product_t natural join order_product_t natural join order_t natural join payment_option_t

where payment_option_t.Payment_Type in ('Debit')

group by product_t.Shoe_ID

);

*select *from prod_Debit_Sum;*

Result Grid | Filter Rows:

Shoe_ID	Product_Price
1002	149
1008	69
1009	99
1011	110
1014	120
1004	39
1013	100

Query7: View

create view Customer_Offers as

(

select customer_t.Customer_ID,concat(customer_t.First_Name,' ',customer_t.Last_Name) as Customer_Name,offer_cust_t.Offer_ID,offer_cust_t.Offer_Cust_Desc

from customer_t,offer_cust_t

where customer_t.Customer_ID=offer_cust_t.Customer_ID

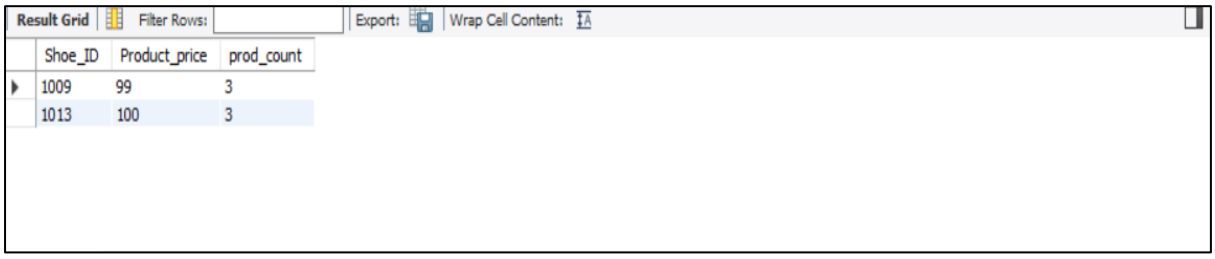
);

*select *from Customer_Offers;*

Customer_ID	Customer_Name	Offer_ID	Offer_Cust_Desc
1	Ashish Nehra	101	New Registration
1	Ashish Nehra	110	Frequent Buyer
2	Virendra Sehwag	102	New Registration
2	Virendra Sehwag	112	Seasonal
3	Saurav Ganguly	101	New Registration
3	Saurav Ganguly	103	Frequent Buyer
4	Mahendra Singh Dhoni	104	Seasonal
5	Suresh Raina	105	Frequent Buyer
5	Suresh Raina	114	Seasonal
6	Rohit Sharma	106	New Registration
7	Virat Kohli	104	Seasonal
7	Virat Kohli	107	Frequent Buyer
8	Yuzvendra Chahal	108	Frequent Buyer ...
9	Yuvraj Singh	109	New Registration
10	Robin Uthhapa	110	Frequent Buyer
11	Umesh Yadav	111	Frequent Buyer
12	Kuldeep Yadav	112	Seasonal
13	Shikhar Dhawan	113	New Registration
14	Ravindra Jadeja	114	Seasonal
15	Ravi Ashwin	115	Frequent Buyer
16	Navdeep Saini	116	Seasonal
17	Mohammed Siraj	117	Frequent Buyer
18	S Sreesant	118	Frequent Buyer ...
19	Zaheer Khan	119	Frequent Buyer ...
20	Sachin Tendulkar	120	Frequent Buyer

Query8: Create a Stored Procedure for obtaining Product Information that have been order more than x times.

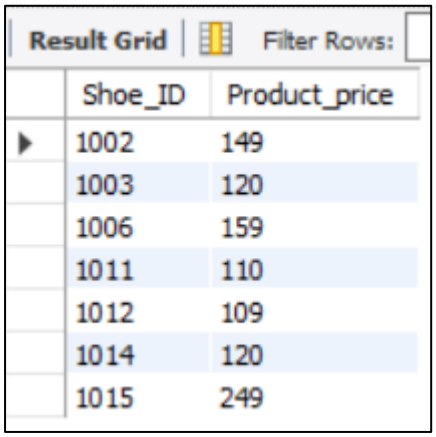
```
DELIMITER //
create procedure prod_ord_count(in x_prod_count int(11))
begin
select p.Shoe_ID,p.Product_price,tbl.prod_count
from product_t as p
inner join
(select o.Shoe_ID,count(o.Shoe_ID) as prod_count
from order_product_t o
group by o.Shoe_ID
having count(o.Shoe_ID)>x_prod_count
)tbl
on p.Shoe_ID=tbl.Shoe_ID;
END //
DELIMITER ;

call prod_ord_count(2);
```



Shoe_ID	Product_price	prod_count
1009	99	3
1013	100	3

Query9: Create a Stored Procedure for obtaining product information which have been ordered and have price more than x

```
DELIMITER //
create procedure prod_ord_sum(in x_prod_sum int(11))
begin
select product_t.Shoe_ID,product_t.Product_price
from product_t,order_product_t
where product_t.Shoe_ID=order_product_t.Shoe_ID
AND product_t.Product_Price>x_prod_sum;
END //
DELIMITER ;
call prod_ord_sum(100);
```



Shoe_ID	Product_price
1002	149
1003	120
1006	159
1011	110
1012	109
1014	120
1015	249