**MANY CHARMS DATABASE**

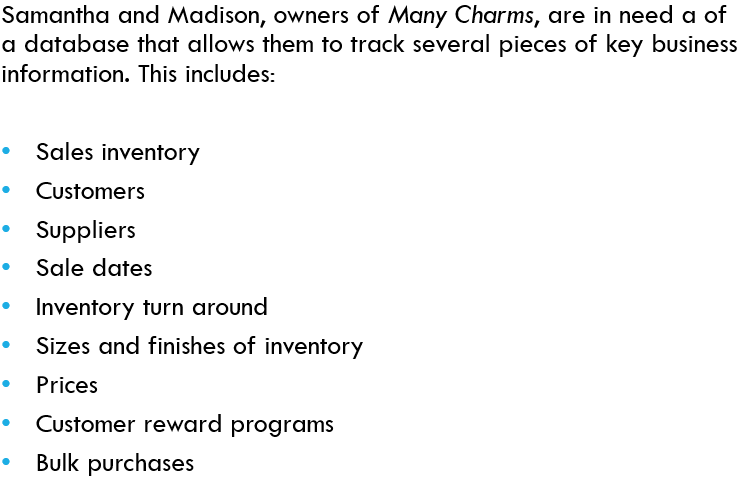
**----PROBLEM DEFINITION----**

The business owners don’t have a database that allows them to track many important pieces of information. Back when the business was just a hobby, this technology wasn’t needed. However, as sales have steadily increased, the business owners need a system that helps track information to keep things running smoothly.

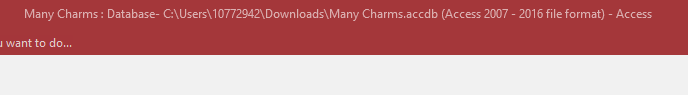
**----STAKEHOLDER ANALYSIS----**

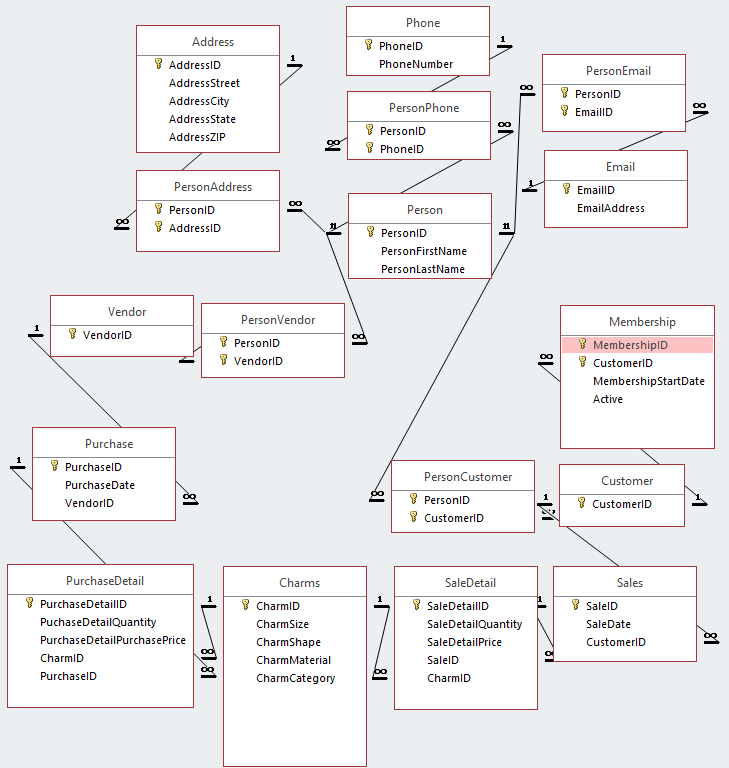
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**----SOLUTION OBJECTIVES----**

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**----ERD----**

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**----CREATING THE DATABASE----**

CREATE DATABASE ManyCharms

USE ManyCharms

GO

CREATE TABLE Person

(

PersonID INT NOT NULL IDENTITY PRIMARY KEY,

PersonFirstName VARCHAR (50) NOT NULL,

PersonLastName VARCHAR (50) NOT NULL,

PersonCompanyName VARCHAR (50) NOT NULL,

);

CREATE TABLE Address

(

AddressID INT NOT NULL IDENTITY PRIMARY KEY,

AddressCity VARCHAR (50) NOT NULL,

AddressState VARCHAR (50) NOT NULL,

AddressStreet VARCHAR (100) NULL,

AddressZIP INT NOT NULL,

);

CREATE TABLE PersonAddress

(

PersonID INT NOT NULL REFERENCES Person(PersonID),

AddressID INT NOT NULL REFERENCES Address(AddressID),

PRIMARY KEY (AddressID, PersonID)

);

CREATE TABLE Vendor

(

VendorID INT NOT NULL IDENTITY PRIMARY KEY,

);

CREATE TABLE PersonVendor

(

PersonID INT NOT NULL REFERENCES Person(PersonID),

VendorID INT NOT NULL REFERENCES Vendor(VendorID),

PRIMARY KEY (VendorID, PersonID)

);

CREATE TABLE Customer

(

CustomerID INT NOT NULL IDENTITY PRIMARY KEY,

);

CREATE TABLE PersonCustomer

(

PersonID INT NOT NULL REFERENCES Person(PersonID),

CustomerID INT NOT NULL REFERENCES Customer(CustomerID),

PRIMARY KEY (CustomerID, PersonID)

);

CREATE TABLE Membership

(

MembershipID INT NOT NULL IDENTITY PRIMARY KEY,

CustomerID INT NOT NULL REFERENCES Customer(CustomerID),

MembershipStartDate DATE NULL,

Active VARCHAR (20)

);

CREATE TABLE Phone

(

PhoneID INT NOT NULL IDENTITY PRIMARY KEY,

PhoneNumber NVARCHAR(13) NULL,

);

CREATE TABLE PersonPhone

(

PersonID INT NOT NULL REFERENCES Person(PersonID),

PhoneID INT NOT NULL REFERENCES Phone(PhoneID),

PRIMARY KEY (PhoneID, PersonID)

);

CREATE TABLE Email

(

EmailID INT NOT NULL IDENTITY PRIMARY KEY,

EmailAddress VARCHAR (50) NOT NULL,

);

CREATE TABLE PersonEmail

(

PersonID INT NOT NULL REFERENCES Person(PersonID),

EmailID INT NOT NULL REFERENCES Email(EmailID),

PRIMARY KEY (EmailID, PersonID)

);

CREATE TABLE Purchase

(

PurchaseID INT NOT NULL IDENTITY PRIMARY KEY,

PurchaseDate INT NOT NULL,

VendorID INT NOT NULL REFERENCES Vendor(VendorID),

);

CREATE TABLE Charms

(

CharmID INT NOT NULL IDENTITY PRIMARY KEY,

CharmSize VARCHAR (20) NULL,

CharmShape VARCHAR (20) NULL,

CharmMaterial VARCHAR (20) NULL,

CharmCategory VARCHAR (20) NULL

);

CREATE TABLE PurchaseDetail

(

PurchaseDetailID INT NOT NULL IDENTITY PRIMARY KEY,

PurchaseDetailPrice MONEY NOT NULL,

PurchaseDetailQuantity INT NOT NULL,

PurchaseID INT NOT NULL REFERENCES Purchase(PurchaseID),

CharmID INT NOT NULL REFERENCES Charms(CharmID)

);

CREATE TABLE Sales

(

SaleID INT NOT NULL IDENTITY PRIMARY KEY,

SaleDate DATETIME NULL,

CustomerID INT NOT NULL REFERENCES Customer(CustomerID)

);

CREATE TABLE SaleDetail

(

SaleDetailID INT NOT NULL IDENTITY PRIMARY KEY,

SaleDetailSalesPrice MONEY NOT NULL,

SaleDetailQuantity INT NOT NULL,

SaleID INT NOT NULL REFERENCES Sales(SaleID),

CharmID INT NOT NULL REFERENCES Charms(CharmID)

);

**----INSERTING THE DATA----**

INSERT INTO Person (PersonID, CustomerID, PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('McDonalds', 'Andrew', 'Adams')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Mortons Steakhouse', 'Ariel', 'Abrams')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Sothebys', 'Barry', 'Bolero')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Bank of America', 'Cynthia', 'Anderson')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Utah Valley University', 'Howard', 'White')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Muffins, LLC', 'Jamie', 'Cook')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Sunshine Corp', 'Frederick', 'Smith')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('IBM', 'Mary', 'Steward')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Sephora', 'April', 'Peterson')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Frontier Airlines', 'Janelle', 'Jaeger')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Charms Unlimited', 'Chuckie', 'McCormick')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Charms Unlimited', 'Brandy', 'Norris')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Charms Unlimited', 'Sally', 'Mason')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Jewelry Galore', 'Fatima', 'Kalil')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Jewelry Galore', 'Abdullah', 'Ghorbani')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Charming Accessories Plus', 'Natasha', 'Demko')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Charming Accessories Plus', 'David', 'Mathers')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Charm Bracelets And More', 'Joanna', 'Steele')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('The Charms Company', 'Margaret', 'Fletcher')

INSERT INTO Person (PersonCompanyName, PersonFirstName, PersonLastName)

VALUES ('Necklaces 4 U', 'Michael', 'Dodson')

INSERT INTO Charms (CharmSize, CharmShape, CharmMaterial, CharmCategory)

VALUES ('Small', 'Heart', 'Gold', 'Bracelet')

INSERT INTO Charms (CharmSize, CharmShape, CharmMaterial, CharmCategory)

VALUES ('Small', 'Star', 'Bronze', 'Bracelet')

INSERT INTO Charms (CharmSize, CharmShape, CharmMaterial, CharmCategory)

VALUES ('Medium', 'Heart', 'Silver', 'Bracelet')

INSERT INTO Charms (CharmSize, CharmShape, CharmMaterial, CharmCategory)

VALUES ('Medium', 'Mermaid', 'Bronze', 'Bracelet')

INSERT INTO Charms (CharmSize, CharmShape, CharmMaterial, CharmCategory)

VALUES ('Small', 'Cat', 'Silver', 'Bracelet')

INSERT INTO Charms (CharmSize, CharmShape, CharmMaterial, CharmCategory)

VALUES ('Medium', 'Paw Prints', 'Bronze', 'Necklace')

INSERT INTO Charms (CharmSize, CharmShape, CharmMaterial, CharmCategory)

VALUES ('Small', 'Sandal', 'Silver', 'Necklace')

INSERT INTO Charms (CharmSize, CharmShape, CharmMaterial, CharmCategory)

VALUES ('Medium', 'Daisy', 'Gold', 'Necklace')

INSERT INTO Charms (CharmSize, CharmShape, CharmMaterial, CharmCategory)

VALUES ('Small', 'Fish', 'Silver', 'Necklace')

INSERT INTO Charms (CharmSize, CharmShape, CharmMaterial, CharmCategory)

VALUES ('Medium', 'Crescent Moon', 'Bronze', 'Necklace')

INSERT INTO Charms (CharmSize, CharmShape, CharmMaterial, CharmCategory)

VALUES ('Small', NULL, 'Silver', 'Chain')

INSERT INTO Charms (CharmSize, CharmShape, CharmMaterial, CharmCategory)

VALUES ('Medium', NULL, 'Gold', 'Chain')

INSERT INTO Charms (CharmSize, CharmShape, CharmMaterial, CharmCategory)

VALUES (NULL, NULL, 'Silver', 'Pin')

INSERT INTO Charms (CharmSize, CharmShape, CharmMaterial, CharmCategory)

VALUES (NULL, NULL, 'Gold', 'Pin')

SET IDENTITY\_INSERT dbo.Customer ON

INSERT [dbo].[Customer] ([CustomerID])

VALUES (1)

INSERT [dbo].[Customer] ([CustomerID])

VALUES (2)

INSERT [dbo].[Customer] ([CustomerID])

VALUES (3)

INSERT [dbo].[Customer] ([CustomerID])

VALUES (4)

INSERT [dbo].[Customer] ([CustomerID])

VALUES (5)

INSERT [dbo].[Customer] ([CustomerID])

VALUES (6)

INSERT [dbo].[Customer] ([CustomerID])

VALUES (7)

INSERT [dbo].[Customer] ([CustomerID])

VALUES (8)

INSERT [dbo].[Customer] ([CustomerID])

VALUES (9)

INSERT [dbo].[Customer] ([CustomerID])

VALUES (10)

INSERT [dbo].[PersonCustomer] ([CustomerID],[PersonID])

VALUES (1, 1)

INSERT [dbo].[PersonCustomer] ([CustomerID],[PersonID])

VALUES (2, 2)

INSERT [dbo].[PersonCustomer] ([CustomerID],[PersonID])

VALUES (3, 3)

INSERT [dbo].[PersonCustomer] ([CustomerID],[PersonID])

VALUES (4, 4)

INSERT [dbo].[PersonCustomer] ([CustomerID],[PersonID])

VALUES (5, 5)

INSERT [dbo].[PersonCustomer] ([CustomerID],[PersonID])

VALUES (6, 6)

INSERT [dbo].[PersonCustomer] ([CustomerID],[PersonID])

VALUES (7, 7)

INSERT [dbo].[PersonCustomer] ([CustomerID],[PersonID])

VALUES (8, 8)

INSERT [dbo].[PersonCustomer] ([CustomerID],[PersonID])

VALUES (9, 9)

INSERT [dbo].[PersonCustomer] ([CustomerID],[PersonID])

VALUES (10, 10)

SET IDENTITY\_INSERT dbo.Customer OFF

SET IDENTITY\_INSERT dbo.Vendor ON

INSERT [dbo].[Vendor] ([VendorID])

VALUES (1)

INSERT [dbo].[Vendor] ([VendorID])

VALUES (2)

INSERT [dbo].[Vendor] ([VendorID])

VALUES (3)

INSERT [dbo].[Vendor] ([VendorID])

VALUES (4)

INSERT [dbo].[Vendor] ([VendorID])

VALUES (5)

INSERT [dbo].[Vendor] ([VendorID])

VALUES (6)

INSERT [dbo].[Vendor] ([VendorID])

VALUES (7)

INSERT [dbo].[Vendor] ([VendorID])

VALUES (8)

INSERT [dbo].[Vendor] ([VendorID])

VALUES (9)

INSERT [dbo].[Vendor] ([VendorID])

VALUES (10)

INSERT [dbo].[PersonVendor] ([PersonID],[VendorID])

VALUES (11, 1)

INSERT [dbo].[PersonVendor] ([PersonID],[VendorID])

VALUES (12, 2)

INSERT [dbo].[PersonVendor] ([PersonID],[VendorID])

VALUES (13, 3)

INSERT [dbo].[PersonVendor] ([PersonID],[VendorID])

VALUES (14, 4)

INSERT [dbo].[PersonVendor] ([PersonID],[VendorID])

VALUES (15, 5)

INSERT [dbo].[PersonVendor] ([PersonID],[VendorID])

VALUES (16, 6)

INSERT [dbo].[PersonVendor] ([PersonID],[VendorID])

VALUES (17, 7)

INSERT [dbo].[PersonVendor] ([PersonID],[VendorID])

VALUES (18, 8)

INSERT [dbo].[PersonVendor] ([PersonID],[VendorID])

VALUES (19, 9)

INSERT [dbo].[PersonVendor] ([PersonID],[VendorID])

VALUES (20, 10)

SET IDENTITY\_INSERT dbo.Vendor OFF

SET IDENTITY\_INSERT dbo.Membership ON

INSERT [dbo].[Membership] ([MembershipID],[CustomerID],[MembershipStartDate],[Active])

VALUES (000123, 1, '01/15/2018', 'Yes')

INSERT [dbo].[Membership] ([MembershipID],[CustomerID],[MembershipStartDate],[Active])

VALUES (000124, 2, '02/05/2018', 'No')

INSERT [dbo].[Membership] ([MembershipID],[CustomerID],[MembershipStartDate],[Active])

VALUES (000125, 3, '02/15/2018', 'Yes')

INSERT [dbo].[Membership] ([MembershipID],[CustomerID],[MembershipStartDate],[Active])

VALUES (000126, 4, '03/01/2018', 'Yes')

INSERT [dbo].[Membership] ([MembershipID],[CustomerID],[MembershipStartDate],[Active])

VALUES (000127, 5, '05/23/2018', 'Yes')

INSERT [dbo].[Membership] ([MembershipID],[CustomerID],[MembershipStartDate],[Active])

VALUES (000128, 6, '05/26/2018', 'Yes')

INSERT [dbo].[Membership] ([MembershipID],[CustomerID],[MembershipStartDate],[Active])

VALUES (000129, 7, '06/10/2018', 'Yes')

INSERT [dbo].[Membership] ([MembershipID],[CustomerID],[MembershipStartDate],[Active])

VALUES (000130, 8, '09/11/2018', 'Yes')

INSERT [dbo].[Membership] ([MembershipID],[CustomerID],[MembershipStartDate],[Active])

VALUES (000131, 9, '10/02/2018', 'Yes')

INSERT [dbo].[Membership] ([MembershipID],[CustomerID],[MembershipStartDate],[Active])

VALUES (000132, 10, '11/07/2018', 'Yes')

SET IDENTITY\_INSERT dbo.Membership OFF

SET IDENTITY\_INSERT dbo.Sales ON

INSERT [dbo].[Sales] ([SaleID],[SaleDate],[CustomerID])

VALUES (10001,'02/16/2018', 1)

INSERT [dbo].[Sales] ([SaleID],[SaleDate],[CustomerID])

VALUES (10002,'02/27/2018', 1)

INSERT [dbo].[Sales] ([SaleID],[SaleDate],[CustomerID])

VALUES (10003,'02/25/2018', 3)

INSERT [dbo].[Sales] ([SaleID],[SaleDate],[CustomerID])

VALUES (10004,'04/06/2018', 3)

INSERT [dbo].[Sales] ([SaleID],[SaleDate],[CustomerID])

VALUES (10005,'06/16/2018', 5)

INSERT [dbo].[Sales] ([SaleID],[SaleDate],[CustomerID])

VALUES (10006,'07/26/2018', 6)

INSERT [dbo].[Sales] ([SaleID],[SaleDate],[CustomerID])

VALUES (10007,'08/11/2018', 7)

INSERT [dbo].[Sales] ([SaleID],[SaleDate],[CustomerID])

VALUES (10008,'10/14/2018', 8)

INSERT [dbo].[Sales] ([SaleID],[SaleDate],[CustomerID])

VALUES (10009,'10/16/2018', 3)

INSERT [dbo].[Sales] ([SaleID],[SaleDate],[CustomerID])

VALUES (10010,'11/07/2018', 9)

INSERT [dbo].[Sales] ([SaleID],[SaleDate],[CustomerID])

VALUES (10011,'11/07/2018', 10)

SET IDENTITY\_INSERT dbo.Sales OFF

SET IDENTITY\_INSERT dbo.SaleDetail ON

INSERT [dbo].[SaleDetail] ([SaleDetailID],[SaleDetailSalesPrice],[SaleDetailQuantity],[SaleID],[CharmID])

VALUES (12001, $300.00, 2, 10001, 1)

INSERT [dbo].[SaleDetail] ([SaleDetailID],[SaleDetailSalesPrice],[SaleDetailQuantity],[SaleID],[CharmID])

VALUES (12002, $100.00, 1, 10002, 3)

INSERT [dbo].[SaleDetail] ([SaleDetailID],[SaleDetailSalesPrice],[SaleDetailQuantity],[SaleID],[CharmID])

VALUES (12003, $100.00, 1, 10003, 4)

INSERT [dbo].[SaleDetail] ([SaleDetailID],[SaleDetailSalesPrice],[SaleDetailQuantity],[SaleID],[CharmID])

VALUES (12004, $200.00, 1, 10004, 8)

INSERT [dbo].[SaleDetail] ([SaleDetailID],[SaleDetailSalesPrice],[SaleDetailQuantity],[SaleID],[CharmID])

VALUES (12005, $400.00, 2, 10005, 8)

INSERT [dbo].[SaleDetail] ([SaleDetailID],[SaleDetailSalesPrice],[SaleDetailQuantity],[SaleID],[CharmID])

VALUES (12006, $100.00, 1, 10006, 2)

INSERT [dbo].[SaleDetail] ([SaleDetailID],[SaleDetailSalesPrice],[SaleDetailQuantity],[SaleID],[CharmID])

VALUES (12007, $200.00, 2, 10007, 5)

INSERT [dbo].[SaleDetail] ([SaleDetailID],[SaleDetailSalesPrice],[SaleDetailQuantity],[SaleID],[CharmID])

VALUES (12008, $100.00, 1, 10008, 3)

INSERT [dbo].[SaleDetail] ([SaleDetailID],[SaleDetailSalesPrice],[SaleDetailQuantity],[SaleID],[CharmID])

VALUES (12009, $75.00, 1, 10009, 12)

INSERT [dbo].[SaleDetail] ([SaleDetailID],[SaleDetailSalesPrice],[SaleDetailQuantity],[SaleID],[CharmID])

VALUES (12010, $70.00, 1, 10010, 11)

INSERT [dbo].[SaleDetail] ([SaleDetailID],[SaleDetailSalesPrice],[SaleDetailQuantity],[SaleID],[CharmID])

VALUES (12011, $400.00, 4, 10011, 2)

SET IDENTITY\_INSERT dbo.SaleDetail OFF

SET IDENTITY\_INSERT dbo.Purchase ON

INSERT [dbo].[Purchase] ([PurchaseID],[PurchaseDate],[VendorID])

VALUES (101, '01012018', 1)

INSERT [dbo].[Purchase] ([PurchaseID],[PurchaseDate],[VendorID])

VALUES (102, '01072018', 2)

INSERT [dbo].[Purchase] ([PurchaseID],[PurchaseDate],[VendorID])

VALUES (103, '01182018', 3)

INSERT [dbo].[Purchase] ([PurchaseID],[PurchaseDate],[VendorID])

VALUES (104, '02012018', 4)

INSERT [dbo].[Purchase] ([PurchaseID],[PurchaseDate],[VendorID])

VALUES (105, '02012018', 5)

INSERT [dbo].[Purchase] ([PurchaseID],[PurchaseDate],[VendorID])

VALUES (106, '02072018', 6)

INSERT [dbo].[Purchase] ([PurchaseID],[PurchaseDate],[VendorID])

VALUES (107, '02072018', 7)

INSERT [dbo].[Purchase] ([PurchaseID],[PurchaseDate],[VendorID])

VALUES (108, '02072018', 8)

INSERT [dbo].[Purchase] ([PurchaseID],[PurchaseDate],[VendorID])

VALUES (109, '02182018', 9)

INSERT [dbo].[Purchase] ([PurchaseID],[PurchaseDate],[VendorID])

VALUES (110, '02212018', 10)

INSERT [dbo].[Purchase] ([PurchaseID],[PurchaseDate],[VendorID])

VALUES (111, '03082018', 1)

INSERT [dbo].[Purchase] ([PurchaseID],[PurchaseDate],[VendorID])

VALUES (112, '03082018', 2)

INSERT [dbo].[Purchase] ([PurchaseID],[PurchaseDate],[VendorID])

VALUES (113, '03082018', 2)

INSERT [dbo].[Purchase] ([PurchaseID],[PurchaseDate],[VendorID])

VALUES (114, '03282018', 4)

SET IDENTITY\_INSERT dbo.Purchase OFF

SET IDENTITY\_INSERT dbo.PurchaseDetail ON

INSERT [dbo].[PurchaseDetail] ([PurchaseDetailID],[PurchaseDetailQuantity],[PurchaseDetailPrice],[CharmID],[PurchaseID])

VALUES (201, 2, 50.00, 2, 101)

INSERT [dbo].[PurchaseDetail] ([PurchaseDetailID],[PurchaseDetailQuantity],[PurchaseDetailPrice],[CharmID],[PurchaseID])

VALUES (202, 3, 60.00, 3, 102)

INSERT [dbo].[PurchaseDetail] ([PurchaseDetailID],[PurchaseDetailQuantity],[PurchaseDetailPrice],[CharmID],[PurchaseID])

VALUES (203, 2, 50.00, 4, 103)

INSERT [dbo].[PurchaseDetail] ([PurchaseDetailID],[PurchaseDetailQuantity],[PurchaseDetailPrice],[CharmID],[PurchaseID])

VALUES (204, 3, 60.00, 5, 104)

INSERT [dbo].[PurchaseDetail] ([PurchaseDetailID],[PurchaseDetailQuantity],[PurchaseDetailPrice],[CharmID],[PurchaseID])

VALUES (205, 2, 50.00, 6, 105)

INSERT [dbo].[PurchaseDetail] ([PurchaseDetailID],[PurchaseDetailQuantity],[PurchaseDetailPrice],[CharmID],[PurchaseID])

VALUES (206, 3, 75.00, 7, 106)

INSERT [dbo].[PurchaseDetail] ([PurchaseDetailID],[PurchaseDetailQuantity],[PurchaseDetailPrice],[CharmID],[PurchaseID])

VALUES (207, 2, 80.00, 8, 107)

INSERT [dbo].[PurchaseDetail] ([PurchaseDetailID],[PurchaseDetailQuantity],[PurchaseDetailPrice],[CharmID],[PurchaseID])

VALUES (208, 3, 90.00, 9, 108)

INSERT [dbo].[PurchaseDetail] ([PurchaseDetailID],[PurchaseDetailQuantity],[PurchaseDetailPrice],[CharmID],[PurchaseID])

VALUES (209, 2, 60.00, 10, 109)

INSERT [dbo].[PurchaseDetail] ([PurchaseDetailID],[PurchaseDetailQuantity],[PurchaseDetailPrice],[CharmID],[PurchaseID])

VALUES (210, 3, 90.00, 11, 110)

INSERT [dbo].[PurchaseDetail] ([PurchaseDetailID],[PurchaseDetailQuantity],[PurchaseDetailPrice],[CharmID],[PurchaseID])

VALUES (211, 4, 40.00, 12, 111)

INSERT [dbo].[PurchaseDetail] ([PurchaseDetailID],[PurchaseDetailQuantity],[PurchaseDetailPrice],[CharmID],[PurchaseID])

VALUES (212, 4, 40.00, 13, 112)

INSERT [dbo].[PurchaseDetail] ([PurchaseDetailID],[PurchaseDetailQuantity],[PurchaseDetailPrice],[CharmID],[PurchaseID])

VALUES (213, 4, 40.00, 14, 113)

INSERT [dbo].[PurchaseDetail] ([PurchaseDetailID],[PurchaseDetailQuantity],[PurchaseDetailPrice],[CharmID],[PurchaseID])

VALUES (214, 4, 40.00, 15, 114)

SET IDENTITY\_INSERT dbo.PurchaseDetail OFF

SET IDENTITY\_INSERT dbo.Email ON  
  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (1, 'AAdams@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (2, 'ArielA1@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (3, 'VeryBarry1234@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (4, 'CindyRoxx@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (5, 'HWhite76@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (6, 'JamieJamie2020@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (7, 'FredSmith257@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (8, 'StewardLady@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (9, 'AprilPeterson86@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (10, 'Janelly16720@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (11, 'ChuckMM23@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (12, 'BNorris@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (13, 'SallyMason1009@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (14, 'Fatima\_Kalil\_89@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (15, 'AGhorbani\_001@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (16, 'NDemko77779@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (17, 'DavidCMathers1996@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (18, 'JDizzle@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (19, 'MsFletcher8585@gmail.com')  
INSERT [dbo].[Email] ([EmailID],[EmailAddress])   
VALUES (20, 'MikeDodson110085@gmail.com')  
  
SET IDENTITY\_INSERT dbo.Email OFF

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (1, 1)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (2, 2)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (3, 3)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (4, 4)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (5, 5)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (6, 6)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (7, 7)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (8, 8)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (9, 9)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (10, 10)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (11, 11)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (12, 12)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (13, 13)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (14, 14)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (15, 15)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (16, 16)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (17, 17)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (18, 18)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (19, 19)

INSERT[dbo].[PersonEmail] ([EmailID],[PersonID])

VALUES (20, 20)

SET IDENTITY\_INSERT dbo.[Address] ON

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (1, 'Orem', 'UT', '4151 Main St', '84057')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (2, 'Orem', 'UT', '17 Circle Street', '84057')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (3, 'Muir Beach', 'CA', '19 Starbuck Dr', '94905')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (4, 'Provo', 'UT', '21 Black Jack Ct', '84053')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (5, 'Taylorsville', 'UT', '300 Pleasant Lane', '84227')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (6, 'Beverly Hills', 'CA', '1616 Rodeo Drive', '90210')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (7, 'Williamsville', 'NY', '3427 Sweet Tooth Drive', '14221')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (8, 'Orem', 'UT', '1666 Main St', '84057')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (9, 'Orem', 'UT', '25 Eagle Drive', '84054')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (10, 'Draper', 'UT', '41 Center St', '84557')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (11, 'Las Vegas', 'NV', '9114 Debauchery Drive', '24771')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (12, 'Phoenix', 'AZ', '8879 Queens St', '22345')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (13, 'Orem', 'UT', '200 Square Drive', '84057')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (14, 'Orem', 'UT', '3341 Elderberry Ct', '84057')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (15, 'Orem', 'UT', '209 Frontier Drive', '84057')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (16, 'Payson', 'UT', '23 Clarity St', '84059')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (17, 'Orem', 'UT', '88 Sunset Blvd', '84057')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (18, 'Provo', 'UT', '77 Lovely Lane', '84055')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (19, 'Orem', 'UT', '368 Downton Court', '84057')

INSERT[dbo].[Address] ([AddressID],[AddressCity],[AddressState],[AddressStreet],[AddressZip])

VALUES (20, 'Arlington', 'VA', '2409 Washington Ave', '22010')

SET IDENTITY\_INSERT dbo.[Address] OFF

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (1,1)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (2,2)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (3,3)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (4,4)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (5,5)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (6,6)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (7,7)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (8,8)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (9,9)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (10,10)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (11,11)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (12,12)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (13,13)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (14,14)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (15,15)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (16,16)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (17,17)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (18,18)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (19,19)

INSERT[dbo].[PersonAddress] ([PersonID],[AddressID])

VALUES (20,20)

SET IDENTITY\_INSERT dbo.Phone ON

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (1, '385-444-4001')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (2, '385-121-4507')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (3, '385-787-8888')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (4, NULL)

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (5, NULL)

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (6, NULL)

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (7, '385-555-0909')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (8, '385-656-0199')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (9, '385-123-0099')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (10, '385-257-8979')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (11, '385-272-8150')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (12, '385-656-9000')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (13, '385-225-9223')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (14, '385-484-4081')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (15, '385-978-7756')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (16, '385-208-3006')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (17, '385-329-7865')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (18, '385-572-3150')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (19, '385-228-9887')

INSERT[dbo].[Phone] ([PhoneID],[PhoneNumber])

VALUES (20, '385-369-8895')

SET IDENTITY\_INSERT dbo.Phone OFF

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (1,1)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (2,2)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (3,3)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (4,4)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (5,5)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (6,6)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (7,7)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (8,8)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (9,9)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (10,10)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (11,11)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (12,12)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (13,13)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (14,14)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (15,15)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (16,16)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (17,17)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (18,18)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (19,19)

INSERT[dbo].[PersonPhone] ([PersonID],[PhoneID])

VALUES (20,20)

**----QUERIES, VIEWS, AND PROCEDURES----**

--Query 1

-- Shows us which customers who bought bracelets have not ordered necklaces

USE ManyCharms

GO

SELECT Charms.CharmID, PersonFirstName + ' ' + PersonLastName AS [Customer Name]

FROM Charms

JOIN SaleDetail ON Charms.CharmID = SaleDetail.CharmID

JOIN Sales ON SaleDetail.SaleID = Sales.SaleID

JOIN Customer AS c on Sales.CustomerID = c.CustomerID

JOIN PersonCustomer AS pc on c.CustomerID = pc.CustomerID

JOIN Person AS p on pc.PersonID = p.PersonID

WHERE Charms.CharmID IN (1, 2, 3, 4, 5) AND Charms.CharmID NOT IN (6, 7, 8, 9, 10);

--Query 2

--This query finds which customers bought more gold charms than silver charms. Uses a union to show which

--customers have bought which material and how many were sold to each customer.

USE ManyCharms

GO

SELECT Charms.CharmID, Charms.CharmMaterial, SaleDetailQuantity AS [Quantity Sold], PersonFirstName + ' ' + PersonLastName AS [Customer Name]

FROM Charms

JOIN SaleDetail ON Charms.CharmID = SaleDetail.CharmID

JOIN Sales ON SaleDetail.SaleID = Sales.SaleID

JOIN Customer AS c on Sales.CustomerID = c.CustomerID

JOIN PersonCustomer AS pc on c.CustomerID = pc.CustomerID

JOIN Person AS p on pc.PersonID = p.PersonID

WHERE Charms.CharmMaterial LIKE 'Gold'

UNION

SELECT Charms.CharmID, Charms.CharmMaterial,SaleDetailQuantity AS [Quantity Sold], PersonFirstName + ' ' + PersonLastName AS [Customer Name]

FROM Charms

JOIN SaleDetail ON Charms.CharmID = SaleDetail.CharmID

JOIN Sales ON SaleDetail.SaleID = Sales.SaleID

JOIN Customer AS c on Sales.CustomerID = c.CustomerID

JOIN PersonCustomer AS pc on c.CustomerID = pc.CustomerID

JOIN Person AS p on pc.PersonID = p.PersonID

WHERE Charms.CharmMaterial LIKE 'Silver'

ORDER BY Charms.CharmMaterial;

-- Both Andrew Adams and Howard White bought more Gold charms than Silver charms

--Query 3

--This query shows us which categories were most profitable over a specified period of time.

USE ManyCharms

GO

SELECT Charms.CharmCategory AS Category, SUM(SaleDetail.SaleDetailSalesPrice) AS [Total Sales]

FROM Charms

JOIN SaleDetail ON Charms.CharmID = SaleDetail.CharmID

GROUP BY CharmCategory

ORDER BY [Total Sales] DESC;

--Query 4

-- This query shows which categories made the most money over a certain period of time. Includes how much

-- each category costed as well.

USE ManyCharms

GO

SELECT PurchaseDetail.PurchaseDetailPrice,

Charms.CharmCategory AS Category,

SUM(SaleDetail.SaleDetailSalesPrice) AS [Total Sales]

FROM PurchaseDetail

JOIN Charms ON PurchaseDetail.CharmID = Charms.CharmID

JOIN SaleDetail ON Charms.CharmID = SaleDetail.CharmID

GROUP BY PurchaseDetailPrice, CharmCategory

ORDER BY [Total Sales] DESC;

--Query 5

--This stored procedure will allow the stakeholder to adjust the price of certain

-- charms by a certain percentage

USE ManyCharms

GO

CREATE PROC spCharmPriceIncrease

AS

UPDATE SaleDetail

SET SaleDetailSalesPrice = SaleDetailSalesPrice \* 1.05

WHERE CharmID LIKE '[1-5]';

--Query 6

-- This creates a new table that only contains customers who have not bought any merchandise

-- in the past 3 months

USE ManyCharms

GO

SELECT SaleDetailSalesPrice, SaleDate, PersonFirstName + ' ' + PersonLastName AS [Customer Name], c.CustomerID

INTO OldCustomers

FROM SaleDetail

JOIN Sales ON SaleDetail.SaleID = Sales.SaleID

JOIN Customer AS c on Sales.CustomerID = c.CustomerID

JOIN PersonCustomer AS pc on c.CustomerID = pc.CustomerID

JOIN Person AS p on pc.PersonID = p.PersonID

WHERE SaleDate NOT BETWEEN '2018-08-01' AND '2018-12-31';

--Query 7

-- This will delete anyone from the new table we created in the previous query who has spent more

-- than $100 in the past year.

DELETE FROM OldCustomers

WHERE SaleDetailSalesPrice >= 100

AND SaleDate > '2018-1-1'

--Query 8

-- Finds all the people in our database who work at companies that start with an M

USE ManyCharms

GO

SELECT PersonFirstName + ' ' + PersonLastName as [Vendor Name], PersonCompanyName

FROM Person

WHERE PersonCompanyName LIKE 'M%'

ORDER BY [Vendor Name];

--Query 9

-- Show how much money we have spent with each of our vendors to purchase inventory

USE ManyCharms

GO

SELECT PurchaseDetailPrice \* PurchaseDetailQuantity AS [Invoice Total], PersonCompanyName

FROM PurchaseDetail

JOIN Purchase AS p ON PurchaseDetail.PurchaseID = p.PurchaseID

JOIN Vendor AS v on p.VendorID = v.VendorID

JOIN PersonVendor AS pv on v.VendorID = pv.VendorID

JOIN Person AS pe on pv.PersonID = pe.PersonID

WHERE PurchaseDetailPrice \* PurchaseDetailQuantity >

(SELECT AVG(PurchaseDetailPrice \* PurchaseDetailQuantity)

FROM PurchaseDetail)

ORDER BY PersonCompanyName;

--Query 10

-- How many contacts we have at each company

USE ManyCharms

GO

SELECT PersonCompanyName, COUNT(PersonFirstName + PersonLastName) AS [Contacts at Company]

FROM Person

GROUP BY PersonCompanyName

ORDER BY COUNT(PersonFirstName + PersonLastName) DESC;

--View 1

-- Shows us the current months sales whenever we run it

CREATE VIEW CurrentMonthSales

AS

SELECT SaleDetailSalesPrice, SaleDetailQuantity, SaleDate

FROM SaleDetail

JOIN Sales ON SaleDetail.SaleID = Sales.SaleID

WHERE SaleDate = MONTH(getdate());

--View 2

-- Whenever this view is run it will show us which people in our persons table are missing phone numbers.

CREATE VIEW NullPhoneNumber

AS

SELECT PhoneNumber, PersonFirstName + ' ' + PersonLastName AS [Customer Name]

FROM Phone

JOIN PersonPhone ON Phone.PhoneID = PersonPhone.PhoneID

JOIN Person ON PersonPhone.PersonID = Person.PersonID

WHERE PhoneNumber IS NULL;

**----TRIGGER----**

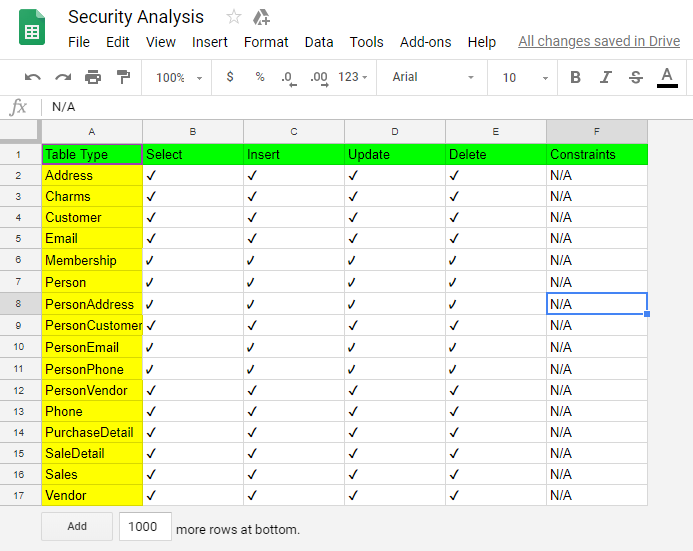
CREATE TRIGGER VendorAdd

ON Vendor

FOR INSERT AS

PRINT 'New Vendor Added'

**----SECURITY ANALYSIS----**

****

**Security Policies and Procedures:**

Users and Admins must change default passwords.

Server must be stored in a secure location, preferably in a locked server rack.

Database and web server should be stored separately

Run updates when available

Data encryption

**----DISASTER RECOVERY----**

Backups - in the event of total database failure, having updated backups available will help us to minimize downtime

* Keep backup in a safe, secure environment, preferably in cloud or off site
* Maintain backups on more than one hard drive
* Perform a full backup once every 6 months
* Perform a differential backup once a month
* Perform an incremental backup every 3 days