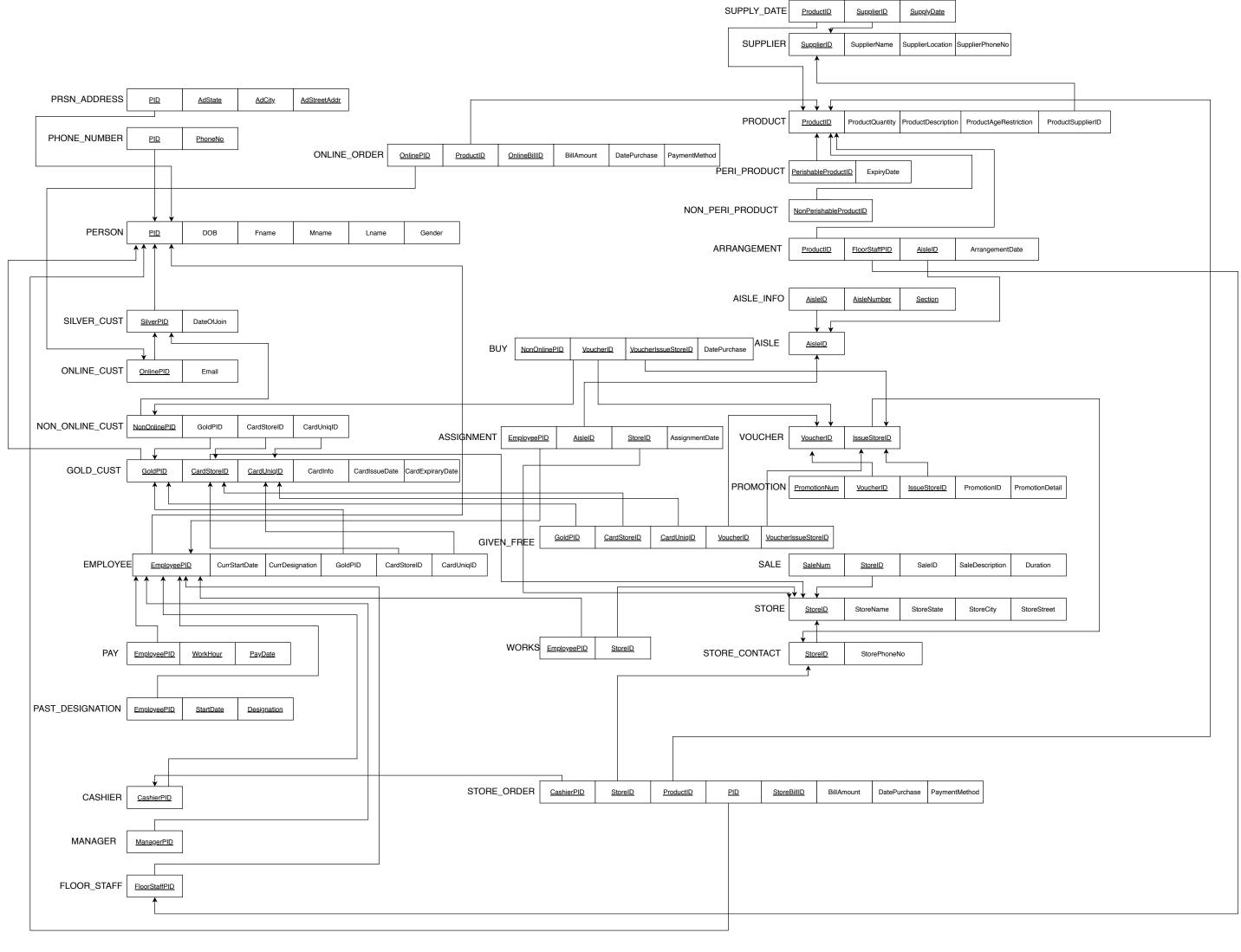
Kunal Mukherjee (kxm180046) Suraj Kothawade (snk170001) Chia-Kai Pan (cxp170010)

4/25/20

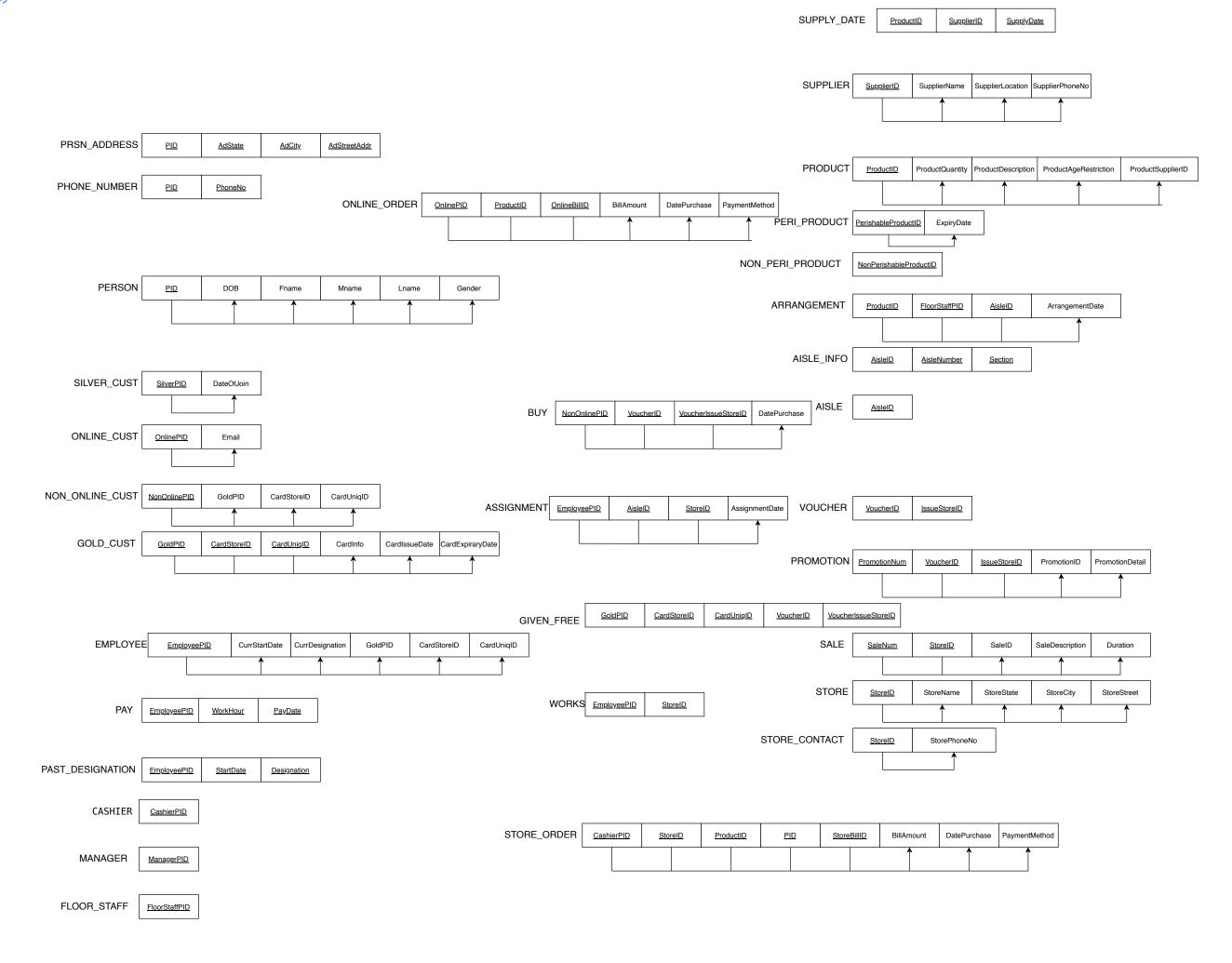
CS 6360

Dr. Wili Wu

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```
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Chia-Kai Pan (cxp170010)
4/25/20
CS 6360
Dr. Wili Wu
Dr. Smita Ghosh
```

Project phase 3 Submission:

### **QUERY**

# 1. List the details of all the managers of the store in the past two months.

SELECT DISTINCT P.PID, P.Fname, P.Mname, P.Lname, P.Gender, PH.PhoneNo, PA.AdStreet, PA.AdCity, PA.AdState, A.StoreID, S.StoreName

FROM PERSON AS P, PHONE\_NUMBER AS PH, PRSN\_ADDRESS AS PA, MANAGER AS M, ASSIGNMENT AS A, STORE AS S

WHERE PH.PID=P.PID AND PA.PID=P.PID AND P.PID = M.ManagerPID AND M.ManagerPID = A.EmployeePID AND S.StoreID = A.StoreID

AND A.AssignmentDate >= DATEADD(MONTH, DATEDIFF(MONTH, 0, GETDATE()) - 2, 0)

	PID	Fname	Mname	Lname	Gender	PhoneNo	AdStreet	AdCity	AdState	StoreID	StoreName
1	P011	Abdul	К	Kalam	Male	8947789092	LAMB 500	KOLKATA	IL	123	BIGBAZAR

# 2. List customers who have bought all perishable items available in the store.

```
SELECT DISTINCT P.PID, P.Fname, P.Mname, P.Lname, P.Gender, PH.PhoneNo, PA.AdStreet, PA.AdCity, PA.AdState
```

FROM PERSON AS P, PHONE NUMBER AS PH, PRSN ADDRESS AS PA

WHERE PH.PID=P.PID AND PA.PID=P.PID

```
AND NOT EXISTS ((
```

SELECT DISTINCT AR.ProductID

FROM ASSIGNMENT AS ASS, FLOOR STAFF AS F,

ARRANGEMENT AS AR, PERI PRODUCT AS P

WHERE ASS.EmployeePID = F.FloorStaffPID AND

F.FloorStaffPID = AR.FloorStaffPID AND

AR.ProductID = P.PerishableProductID

GROUP BY ASS.StoreID, AR.ProductID

) EXCEPT

SELECT DISTINCT SO.ProductID

FROM STORE ORDER AS SO, PERI PRODUCT AS PE

WHERE SO.ProductID = PE.PerishableProductID AND SO.PID = P.PID

GROUP BY SO.StoreID, SO.ProductID

))

GO

	PID	Fname	Mname	Lname	Gender	PhoneNo	AdStreet	AdCity	AdState
1	P004	Erin	S	Leinenbach	Female	2345046004	HWY 500	CHICAG0	IL

3. Find the average number of purchases made by the top five Gold Customers.

```
SELECT AVG(NumOfPurchase) AS AvgPurchase
FROM
 SELECT P1.PID, COUNT(*) AS NumOfPurchase
 FROM PERSON AS P1, STORE ORDER as SO
 WHERE P1.PID IN
     SELECT TOP 5 P.PID AS PID1
     FROM PERSON AS P, GOLD CUST AS G
     WHERE P.PID = G.GoldPID AND
     (SELECT COUNT(*)
     FROM STORE ORDER as SO
     WHERE G.GoldPID = SO.PID AND
     SO.DatePurchase >= DATEADD(YEAR, DATEDIFF(YEAR, 0, GETDATE()) - 1, 0)
     ) >= 12
     GROUP BY P.PID
   )
 AND P1.PID = SO.PID
 GROUP BY P1.PID
) AS Counts
GO
```

	AvgPurchase	
1	20	

4. Find the expiry date of the perishable item that is purchased the most.

SELECT TOP 1 PE.ExpiraryDate, COUNT(\*)
FROM STORE\_ORDER AS SO, PERI\_PRODUCT AS PE
WHERE SO.ProductID = PE.PerishableProductID
GROUP BY PE.PerishableProductID, PE.ExpiraryDate
ORDER BY COUNT(\*) DESC

	ExpiraryDate	PeriItemCount	PerishableProductID
1	2020-03-17	11	452

5. Find the supplier details of products that are out of stock.

SELECT S.SupplierID, S.SupplierName, S.SupplierLocation, S.SupplierPhoneNo FROM PRODUCT AS P, SUPPLIER AS S
WHERE P.ProductQuantity = 0 AND P.ProductSupplierID = S.SupplierID

	SupplierID	SupplierName	SupplierLocation	SupplierPhoneNo
1	41	VIMAL	KOLKATA	5647821287

### 6. Find the total number transactions made at each store.

SELECT COUNT(\*) AS TotalTrans, S.StoreID, S.StoreName FROM STORE AS S, STORE\_ORDER AS SO WHERE S.StoreID = SO.StoreID GROUP BY S.StoreID, S.StoreName ORDER BY COUNT(\*) DESC

	TotalTrans	StoreID	StoreName
1	13	123	BIGBAZAR
2	12	126	KR0GER
3	5	125	WALMART

# 7. Find the employee details who has worked every day of the past week.

SELECT DISTINCT PAY.EmployeePID, P.Fname, P.Mname, P.Lname, P.Gender, PH.PhoneNo, PA.AdStreet, PA.AdCity, PA.AdState
FROM PERSON AS P, PHONE\_NUMBER AS PH,
PRSN\_ADDRESS AS PA, EMPLOYEE AS E, PAY AS PAY
WHERE PH.PID=P.PID AND
PA.PID=P.PID AND
E.EmployeePID=P.PID AND
PAY.EmployeePID=E.EmployeePID AND
E.EmployeePID=P.PID AND
PAY.PayDate >= DATEADD(WEEK, DATEDIFF(WEEK, 0, GETDATE()) - 1, 0)
GROUP BY PAY.EmployeePID, P.Fname, P.Mname, P.Lname, P.Gender, PH.PhoneNo, PA.AdStreet,
PA.AdCity, PA.AdState
HAVING COUNT(\*) = 7

	EmployeePID	Fname	Mname	Lname	Gender	PhoneNo	AdStreet	AdCity	AdState
1	P010	Minal	W	Bonde	Female	2345043504	MARY ROAD	CHICAG0	NM

# 8. Find the count of customers who have bought the most popular product.

```
SELECT COUNT(NumCust) AS CustBuyPopProd
FROM

(
SELECT SO.PID, COUNT(*) AS NumCust
FROM STORE_ORDER AS SO, TOP_POPULAR_PRODUCT AS TP
WHERE SO.ProductID = TP.ProductID
GROUP BY SO.PID
) CustList
```

	CustBuyPopProd	
1	3	_

# 9. List all transaction details issued after the most current employee was hired.

	CashierPID	StoreID	ProductID	PID	StoreBillId	BillAmount	DatePurchase	PaymentMethod
2	P010	123	454	P001	12	345	2019-04-10	Master
3	P010	123	454	P001	16	345	2019-04-10	Master
4	P010	123	454	P001	19	345	2019-04-10	Master
5	P010	123	454	P001	21	345	2019-04-10	Master
6	P010	123	454	P001	23	345	2019-04-10	Master
7	P010	123	454	P001	25	345	2019-04-10	Master
8	P010	123	455	P002	9	435	2019-03-11	Visa
9	P010	126	451	P004	27	12	2019-08-08	Visa
10	P010	126	452	P001	13	234	2019-05-08	Visa
11	P010	126	452	P001	17	234	2019-05-08	Visa

### 10. List all the employees that have enrolled as Gold Customer within a month of being employed.

SELECT DISTINCT P.Fname, P.Mname, P.Lname, P.Gender, PH.PhoneNo, PA.AdStreet, PA.AdCity, PA.AdState

FROM PERSON AS P, PHONE\_NUMBER AS PH, PRSN\_ADDRESS AS PA, EMPLOYEE AS E, GOLD CUST AS G

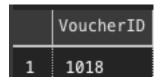
WHERE PH.PID=P.PID AND PA.PID=P.PID AND E.EmployeePID=P.PID AND

E.GoldPID=G.GoldPID AND

G.CardIssueDate BETWEEN E.CurrStartDate AND DATEADD(MONTH, 1, E.CurrStartDate)

	Fname	Mname	Lname	Gender	PhoneNo	AdStreet	AdCity	AdSta
1	Abdul	К	Kalam	Male	8947789092	LAMB 500	KOLKATA	IL

# 11. Find the details of the voucher that are purchased the most.



### 12. Find customers who have been Silver Customer for over 5 years.

SELECT DISTINCT S.SilverPID, P.Fname, P.Mname, P.Lname, P.Gender, PH.PhoneNo, PA.AdStreet, PA.AdCity, PA.AdState

FROM SILVER\_CUST AS S, PERSON AS P, PHONE\_NUMBER AS PH, PRSN\_ADDRESS AS PA WHERE PH.PID=P.PID AND PA.PID=P.PID and P.PID=S.SilverPID AND

S.DateOfJoin >= DATEADD(YEAR, DATEDIFF(YEAR, 0, GETDATE()) - 5, 0)

GO

	SilverPID	Fname	Mname	Lname	Gender	PhoneNo	AdStreet	AdCity	AdState
1	P001	Kunal		Mukherjee	Male	8125503890	COWBOYS PKWY	IRVING	TX
2	P002	Suraj	N	Kothawade	Male	8123546797	BAKER STREET	EVANSVILLE	IL

# 13. Find the number of purchases made by the potential Gold Members in the last year.

SELECT PG.PID, COUNT(\*) AS NumOfPurchase
FROM POTENTIAL\_GOLD\_CUST AS PG, STORE\_ORDER AS SO
WHERE PG.PID = SO.PID AND
SO.DatePurchase >= DATEADD(YEAR, DATEDIFF(YEAR, 0, GETDATE()) - 1, 0)
GROUP BY PG.PID

	PID	NumOfPurchase
1	P002	1

# 14. Find the maximum bill amount and details of the store that has the maximum number of purchases in the last year.

	MaxBillAmount	StoreID	StoreName	StoreState	StoreCity	StoreStreet
1	798	123	BTGBA7AR	TI	FVANVTLLE	RAKER ST

# 15. Find the date of the transaction that has a bill amount greater than the average bill amount of all transactions in the system.

	DatePurchase	BillAmou
1	2019-04-15	798
2	2010-04-10	345
3	2019-04-10	345
4	2019-04-10	345
5	2019-04-10	345
6	2019-04-10	345
7	2019-04-10	345
8	2019-04-10	345
9	2010-03-11	435
	2019-03-11	435
	2019-03-08	443

### **VIEWS:**

1. Top Gold Customer- This view returns the First Name, Last Name and Date of membership enrollment of those gold customers who have transactions more than 12 times in the past year.

```
CREATE VIEW TOP_GOLD_CUST(Fname, Lname, DOMemEnrol) AS SELECT DISTINCT TOP 1 P.Fname, P.Lname, G.CardExpiraryDate FROM PERSON AS P, GOLD_CUST AS G WHERE P.PID = G.GoldPID AND (SELECT COUNT(*) FROM STORE_ORDER as SO WHERE G.GoldPID = SO.PID AND SO.DatePurchase >= DATEADD(YEAR, DATEDIFF(YEAR, 0, GETDATE()) - 1, 0) >= 12 GO
```

2. Popular Product- This view returns the details of the product that customers have purchased the most in the past 2 years.

CREATE VIEW TOP\_POPULAR\_PRODUCT (NumofItems, ProductID, ProductQuantity, ProductDescription, ProductAgeRestriction, ProductSupplierID) AS

SELECT TOP 1 COUNT(\*) AS NumofItems, P.ProductID, P.ProductQuantity, P.ProductDescription, P.ProductAgeRestriction, P.ProductSupplierID

FROM PRODUCT AS P, STORE\_ORDER AS SO

WHERE P.ProductID = SO.ProductID AND SO.DatePurchase >= DATEADD(YEAR, DATEDIFF(YEAR, 0, GETDATE()) - 2, 0)

GROUP BY P.ProductID, P.ProductQuantity, P.ProductDescription, P.ProductAgeRestriction, P.ProductSupplierID

ORDER BY COUNT(\*) DESC

GO

3. Top Store- This view returns the details of the store that has maximum number of purchases in the last year.

CREATE VIEW TOP\_STORE (NumofItems, StoreID, StoreName, StoreStreet, StoreCity, StoreState) AS SELECT TOP 1 COUNT(\*) AS NumofItems, S.StoreID, S.StoreName, S.StoreStreet, S.StoreCity, S.StoreState FROM STORE AS S, STORE\_ORDER AS SO WHERE S.StoreID = SO.StoreID AND SO.DatePurchase >= DATEADD(YEAR, DATEDIFF(YEAR, 0, GETDATE()) - 1, 0)

GROUP BY S.StoreID, S.StoreName, S.StoreStreet, S.StoreCity, S.StoreState ORDER BY COUNT(\*) DESC

GO

4. Potential Gold Customers- This view returns the name, phone number and ID of the Silver Customers who bought more than 10 vouchers in the last month.

```
CREATE VIEW POTENTIAL_GOLD_CUST (Fname, Lname, PhoneNo, PID) AS
SELECT DISTINCT P.Fname, P.Lname, PO.PhoneNo, P.PID
FROM PERSON AS P, PHONE_NUMBER AS PO, SILVER_CUST AS S, NON_ONLINE_CUST AS NC
WHERE PO.PID = P.PID AND P.PID = S.SilverPID AND S.SilverPID = NC.NonOnlinePID
AND
(SELECT COUNT(*)
FROM BUY as B
WHERE B.NonOnlinePID = NC.NonOnlinePID AND
B.DatePurchase >= DATEADD(MONTH, DATEDIFF(MONTH, 0, GETDATE()) - 1, 0)
) >= 10
GO
```

5. Top Supplier - This view returns the details of the supplier who has made the most number of supplies of perishable items in the past month.

```
CREATE VIEW TOP_SUPPLIER (NumofItems, SupplierID, SupplierName, SupplierLocation, SupplierPhoneNo) AS
SELECT TOP 1 COUNT(*) AS NumofItems, S.SupplierID, S.SupplierName, S.SupplierLocation, S.SupplierPhoneNo
FROM SUPPLIER AS S, SUPPLY_DATE AS SD
WHERE S.SupplierID = SD.SupplierID AND SD.SupplyDate >= DATEADD(MONTH, DATEDIFF(MONTH, 0, GETDATE()) - 1, 0)
GROUP BY S.SupplierID, S.SupplierName, S.SupplierLocation, S.SupplierPhoneNo
ORDER BY COUNT(*) DESC
GO
```

### **TABLE CREATION**

```
-- 1>Create the Person Table
CREATE TABLE PERSON
(
 PID CHAR(4) NOT NULL,
 DOB DATE NOT NULL,
  Fname VARCHAR(15) NOT NULL,
  Mname CHAR DEFAULT NULL,
  Lname VARCHAR(15) NOT NULL,
  Gender VARCHAR(15) NOT NULL DEFAULT 'Unknown',
  CONSTRAINT PER PPK
   PRIMARY KEY(PID),
  CONSTRAINT CHK Age
   CHECK (YEAR(GETDATE()) - YEAR(DOB) > 16),
 CONSTRAINT CHK GNDR
   CHECK(Gender in ('Male', 'Female', 'Unknown')),
 CONSTRAINT CHK PID
   CHECK (PID LIKE 'P[0-9][0-9][0-9]')
);
GO
```

```
CREATE TABLE PHONE NUMBER
 PID CHAR(4) NOT NULL,
 PhoneNo CHAR(10) NOT NULL,
 CONSTRAINT PHO PPK
   PRIMARY KEY(PID, PhoneNo),
 CONSTRAINT PHO FRK
   FOREIGN KEY (PID) REFERENCES PERSON(PID)
   ON DELETE CASCADE ON UPDATE CASCADE,
 CONSTRAINT CHK PhoneNo
   );
GO
-- 3>Create the Address Table
CREATE TABLE PRSN ADDRESS
 PID CHAR(4) NOT NULL,
 AdState CHAR(2) NOT NULL,
 AdCity VARCHAR(15) NOT NULL,
 AdStreet VARCHAR(15) NOT NULL,
 CONSTRAINT ADDR PPK
   PRIMARY KEY(PID, AdState, AdCity, AdStreet),
 CONSTRAINT ADDR FRK
   FOREIGN KEY (PID) REFERENCES PERSON(PID)
   ON DELETE CASCADE ON UPDATE CASCADE
);
GO
-- 4>Create the Silver Customer Table
CREATE TABLE SILVER CUST
 SilverPID CHAR(4) NOT NULL,
 DateOfJoin DATE NOT NULL,
 CONSTRAINT SILVER CUST PPK
   PRIMARY KEY(SilverPID),
 CONSTRAINT SILVER CUST FRK
   FOREIGN KEY (SilverPID) REFERENCES PERSON(PID)
   ON DELETE CASCADE ON UPDATE CASCADE
);
GO
-- 5>Create the Onile Customer Table
CREATE TABLE ONLINE CUST
(
 OnlinePID CHAR(4) NOT NULL,
 Email VARCHAR(15) NOT NULL,
 CONSTRAINT ONLINE CUST PPK
   PRIMARY KEY(OnlinePID),
 CONSTRAINT ONLINE CUST FRK
   FOREIGN KEY (OnlinePID) REFERENCES SILVER CUST(SilverPID)
   ON DELETE CASCADE ON UPDATE CASCADE
```

```
);
GO
-- 6>Create the Store Table
CREATE TABLE STORE
 StoreID INT NOT NULL,
 StoreName VARCHAR(10) NOT NULL,
 StoreState CHAR(2) NOT NULL,
 StoreCity VARCHAR(15) NOT NULL,
 StoreStreet VARCHAR(15) NOT NULL,
 CONSTRAINT STORE PPK
   PRIMARY KEY(StoreID)
);
GO
-- 7>Create the StoreContact Table
CREATE TABLE STORE CONTACT
 StoreID INT NOT NULL,
 StorePhoneNo CHAR(10) NOT NULL,
 CONSTRAINT STORE CONTACT PPK
   PRIMARY KEY(StoreID),
 CONSTRAINT STORE CONTACT FRK
   FOREIGN KEY (StoreID) REFERENCES STORE(StoreID)
   ON DELETE CASCADE ON UPDATE CASCADE,
 CONSTRAINT StorePhoneNo
   );
GO
-- 8>Create the Sale Table
CREATE TABLE SALE
 SaleNum INT NOT NULL,
 StoreID INT NOT NULL,
 SaleID CHAR(10) NOT NULL,
 SaleDescription CHAR(15) NOT NULL,
 Duration DATETIME NOT NULL,
 CONSTRAINT SALE PPK
   PRIMARY KEY(SaleNum, StoreID),
 CONSTRAINT SALE FRK
   FOREIGN KEY (StoreID) REFERENCES STORE(StoreID)
   ON DELETE CASCADE ON UPDATE CASCADE,
);
GO
-- 9>Create the Voucher Table
CREATE TABLE VOUCHER
 VoucherID INT NOT NULL,
 IssueStoreID INT NOT NULL,
```

```
CONSTRAINT VOUCHER PPK
   PRIMARY KEY(VoucherID, IssueStoreID),
 CONSTRAINT VOCUHER FRK
   FOREIGN KEY (IssueStoreID) REFERENCES STORE CONTACT(StoreID)
   ON DELETE CASCADE ON UPDATE CASCADE
);
GO
-- 10>Create the Promotion Table
CREATE TABLE PROMOTION
 PromotionNum INT NOT NULL,
  VoucherID INT NOT NULL,
 IssueStoreID INT NOT NULL,
  PromotionID INT NOT NULL,
 PromotionDetail VARCHAR(30) NOT NULL,
 CONSTRAINT PROMOTION PPK
   PRIMARY KEY (PromotionNum, VoucherID, IssueStoreID),
 CONSTRAINT PROMOTION FRK
   FOREIGN KEY (VoucherID, IssueStoreID) REFERENCES VOUCHER(VoucherID, IssueStoreID)
   ON DELETE CASCADE ON UPDATE CASCADE
);
GO
-- 11>Create the Gold Customer Table
CREATE TABLE GOLD CUST
  GoldPID CHAR(4) NOT NULL,
  CardStoreID INT NOT NULL.
 CardUniqID INT NOT NULL UNIQUE,
 CardInfo VARCHAR(15).
  CardIssueDate DATE NOT NULL,
  CardExpiraryDate DATE NOT NULL.
  CONSTRAINT GOLD CUST PPK
   PRIMARY KEY(GoldPID, CardStoreID, CardUniqID),
 CONSTRAINT SILVER CUST FRK1
   FOREIGN KEY (GoldPID) REFERENCES PERSON(PID)
   ON DELETE CASCADE ON UPDATE CASCADE,
 CONSTRAINT GOLD CUST FRK2
   FOREIGN KEY (CardStoreID) REFERENCES STORE(StoreID)
   ON DELETE CASCADE ON UPDATE CASCADE.
 CONSTRAINT CHK DATE
   CHECK( CardIssueDate < CardExpiraryDate)
);
GO
-- 12>Create the Non-Online Customer Table
CREATE TABLE NON ONLINE CUST
 NonOnlinePID CHAR(4) NOT NULL,
 GoldPID CHAR(4),
 CardStoreID INT,
```

```
CardUniqID INT,
  CONSTRAINT NON ONLINE CUST PPK
   PRIMARY KEY(NonOnlinePID),
  CONSTRAINT NON ONLINE CUST FRK1
   FOREIGN KEY (NonOnlinePID) REFERENCES SILVER CUST(SilverPID)
   ON DELETE NO ACTION ON UPDATE NO ACTION,
  CONSTRAINT NON ONLINE CUST FRK2
   FOREIGN KEY (GoldPID, CardStoreID, CardUniqID) REFERENCES GOLD CUST(GoldPID,
CardStoreID, CardUniqID)
   ON DELETE NO ACTION ON UPDATE NO ACTION,
 CONSTRAINT CHK NON ONLINE CUST PID
   CHECK (NonOnlinePID = GoldPID)
);
GO
-- 13>Create the Employee Table
CREATE TABLE EMPLOYEE
 EmployeePID CHAR(4) NOT NULL,
  CurrStartDate DATE NOT NULL,
 CurrDesignation VARCHAR(15) NOT NULL,
  GoldPID CHAR(4),
 CardStoreID INT.
  CardUniqID INT,
 CONSTRAINT EMPLOYEE PPK
   PRIMARY KEY(EmployeePID),
  CONSTRAINT EMPLOYEE FRK1
   FOREIGN KEY (EmployeePID) REFERENCES PERSON (PID)
   ON DELETE NO ACTION ON UPDATE NO ACTION,
 CONSTRAINT EMPLOYEE FRK2
   FOREIGN KEY (GoldPID, CardStoreID, CardUniqID) REFERENCES GOLD CUST(GoldPID,
CardStoreID, CardUniqID)
   ON DELETE NO ACTION ON UPDATE NO ACTION,
 CONSTRAINT CHK EMPLOYEE PID
   CHECK (EmployeePID = GoldPID),
 CONSTRAINT CHK EMPLOYEE DESIGN
   CHECK (CurrDesignation In ('Cashier', 'Manager', 'FloorStaff'))
);
GO
-- 14>Create the Pay Table
CREATE TABLE PAY
  EmployeePID CHAR(4) NOT NULL,
  WorkHour INT NOT NULL,
  PayDate DATE NOT NULL,
 CONSTRAINT PAY PPK
   PRIMARY KEY(EmployeePID, WorkHour, PayDate),
 CONSTRAINT PAY FRK
   FOREIGN KEY (EmployeePID) REFERENCES EMPLOYEE (EmployeePID)
   ON DELETE CASCADE ON UPDATE CASCADE,
);
```

```
-- 15>Create the Past Designation Table
CREATE TABLE PAST DESIGNATION
 EmployeePID CHAR(4) NOT NULL,
 StartDate DATE NOT NULL,
 Designation VARCHAR(15) NOT NULL,
 CONSTRAINT PAST DESIGNATION PPK
   PRIMARY KEY(EmployeePID, StartDate, Designation),
 CONSTRAINT PAST DESIGNATION FRK
   FOREIGN KEY (EmployeePID) REFERENCES EMPLOYEE (EmployeePID)
   ON DELETE CASCADE ON UPDATE CASCADE
);
GO
-- 16>Create the Cashier Table
CREATE TABLE CASHIER
 CashierPID CHAR(4) NOT NULL,
 CONSTRAINT CASHIER PPK
   PRIMARY KEY(CashierPID),
 CONSTRAINT CASHIER FRK
   FOREIGN KEY (CashierPID) REFERENCES EMPLOYEE (EmployeePID)
   ON DELETE CASCADE ON UPDATE CASCADE
);
GO
-- 17>Create the Manager Table
CREATE TABLE MANAGER
 ManagerPID CHAR(4) NOT NULL,
 CONSTRAINT MANAGER PPK
   PRIMARY KEY(ManagerPID),
 CONSTRAINT MANAGER FRK
   FOREIGN KEY (ManagerPID) REFERENCES EMPLOYEE (EmployeePID)
   ON DELETE CASCADE ON UPDATE CASCADE
);
GO
-- 18>Create the Floor Staff Table
CREATE TABLE FLOOR STAFF
(
 FloorStaffPID CHAR(4) NOT NULL,
 CONSTRAINT FLOOR STAFF PPK
   PRIMARY KEY(FloorStaffPID),
 CONSTRAINT FLOOR STAFF FRK
   FOREIGN KEY (FloorStaffPID) REFERENCES EMPLOYEE (EmployeePID)
   ON DELETE CASCADE ON UPDATE CASCADE
);
GO
-- 19>Create the Aisle Table
CREATE TABLE AISLE
```

```
(
 AisleID INT NOT NULL,
 CONSTRAINT AISLE PPK
   PRIMARY KEY(AisleID)
);
GO
-- 20>Create the Aisle Infor Table
CREATE TABLE AISLE INFO
 AisleID INT NOT NULL,
 AisleNumber INT NOT NULL,
 Section INT NOT NULL,
 CONSTRAINT AISLE INFO PPK
   PRIMARY KEY(AisleID, AisleNumber, Section),
 CONSTRAINT AISLE INFO FRK
   FOREIGN KEY (AisleID) REFERENCES AISLE (AisleID)
   ON DELETE CASCADE ON UPDATE CASCADE
);
GO
-- 21>Create the Supplier Table
CREATE TABLE SUPPLIER
(
 SupplierID INT NOT NULL,
 SupplierName VARCHAR(30) NOT NULL,
 SupplierLocation VARCHAR(30) NOT NULL,
 SupplierPhoneNo CHAR(10) NOT NULL,
 CONSTRAINT SUPPLIER PPK
   PRIMARY KEY(SupplierID),
  CONSTRAINT CHK SUPPLIER PhoneNo
   );
GO
-- 22>Create the Product Table
CREATE TABLE PRODUCT
(
 ProductID INT NOT NULL,
 ProductQuantity INT NOT NULL,
 ProductDescription VARCHAR(30) NOT NULL,
 ProductAgeRestriction VARCHAR(3),
 ProductSupplierID INT NOT NULL,
 CONSTRAINT PRODUCT PPK
   PRIMARY KEY(ProductID),
 CONSTRAINT PRODUCT FRK
   FOREIGN KEY (ProductSupplierID) REFERENCES SUPPLIER (SupplierID)
   ON DELETE CASCADE ON UPDATE CASCADE,
 CONSTRAINT CHK AGE RES
   CHECK(ProductAgeRestriction in ('Yes', 'No', 'Unknown')),
);
GO
```

```
-- 23>Create the Perishables Table
CREATE TABLE PERI PRODUCT
 PerishableProductID INT NOT NULL,
 ExpiraryDate DATE NOT NULL,
 CONSTRAINT PERI PRODUCT PPK
   PRIMARY KEY(PerishableProductID),
 CONSTRAINT PERI PRODUCT FRK
   FOREIGN KEY (PerishableProductID) REFERENCES PRODUCT (ProductID)
   ON DELETE CASCADE ON UPDATE CASCADE
);
GO
-- 24>Create the Non-Perishables Table
CREATE TABLE NON PERI PRODUCT
 NonPerishableProductID INT NOT NULL,
 CONSTRAINT NON PERI PRODUCT PPK
   PRIMARY KEY(NonPerishableProductID),
 CONSTRAINT NON PERI PRODUCT FRK
   FOREIGN KEY (NonPerishableProductID) REFERENCES PRODUCT (ProductID)
   ON DELETE CASCADE ON UPDATE CASCADE
);
GO
-- 25>Create the Suply Date
CREATE TABLE SUPPLY DATE
 ProductID INT NOT NULL,
 SupplierID INT NOT NULL,
 SupplyDate DATE NOT NULL,
 CONSTRAINT SUPPLY DATE PPK
   PRIMARY KEY(ProductID, SupplierID, SupplyDate),
 CONSTRAINT SUPPLY DATE FRK1
   FOREIGN KEY (ProductID) REFERENCES PRODUCT (ProductID)
   ON DELETE NO ACTION ON UPDATE NO ACTION,
 CONSTRAINT SUPPLY DATE FRK2
   FOREIGN KEY (SupplierID) REFERENCES SUPPLIER (SupplierID)
   ON DELETE NO ACTION ON UPDATE NO ACTION,
);
GO
-- 26>Create the Arrangement Table
CREATE TABLE ARRANGEMENT
 ProductID INT NOT NULL,
 FloorStaffPID CHAR(4) NOT NULL,
 AisleID INT NOT NULL,
 ArrangementDate DATE NOT NULL,
 CONSTRAINT ARRANGEMENT PPK
   PRIMARY KEY(ProductID, FloorStaffPID, AisleID),
```

```
CONSTRAINT ARRANGEMENT FRK1
   FOREIGN KEY (ProductID) REFERENCES PRODUCT (ProductID)
   ON DELETE CASCADE ON UPDATE CASCADE,
 CONSTRAINT ARRANGEMENT FRK2
   FOREIGN KEY (FloorStaffPID) REFERENCES FLOOR STAFF (FloorStaffPID)
   ON DELETE CASCADE ON UPDATE CASCADE,
 CONSTRAINT ARRANGEMENT FRK3
   FOREIGN KEY (AisleID) REFERENCES AISLE (AisleID)
   ON DELETE CASCADE ON UPDATE CASCADE,
);
GO
-- 27>Create the Buy Table
CREATE TABLE BUY
 NonOnlinePID CHAR(4) NOT NULL,
 VoucherID INT NOT NULL,
 VoucherIssueStoreID INT NOT NULL,
 DatePurchase DATE NOT NULL
 CONSTRAINT BUY PPK
   PRIMARY KEY(NonOnlinePID, VoucherID, VoucherIssueStoreID),
 CONSTRAINT BUY FRK1
   FOREIGN KEY (NonOnlinePID) REFERENCES NON ONLINE CUST (NonOnlinePID)
   ON DELETE NO ACTION ON UPDATE NO ACTION,
 CONSTRAINT BUY FRK2
   FOREIGN KEY (VoucherID, VoucherIssueStoreID) REFERENCES VOUCHER (VoucherID,
IssueStoreID)
   ON DELETE NO ACTION ON UPDATE NO ACTION
);
GO
-- 28>Create the Assignment Table
CREATE TABLE ASSIGNMENT
 EmployeePID CHAR(4) NOT NULL,
 AisleID INT NOT NULL,
 StoreID INT NOT NULL,
 AssignmentDate DATE NOT NULL,
 CONSTRAINT ASSIGNMENT PPK
   PRIMARY KEY(EmployeePID, AisleID, StoreID),
 CONSTRAINT ASSIGNMENT FRK1
   FOREIGN KEY (EmployeePID) REFERENCES EMPLOYEE (EmployeePID)
   ON DELETE CASCADE ON UPDATE CASCADE.
 CONSTRAINT ASSIGNMENT FRK2
   FOREIGN KEY (AisleID) REFERENCES AISLE (AisleID)
   ON DELETE CASCADE ON UPDATE CASCADE,
 CONSTRAINT ASSIGNMENT FRK3
   FOREIGN KEY (StoreID) REFERENCES STORE (StoreID)
   ON DELETE CASCADE ON UPDATE CASCADE
);
GO
```

```
-- 29>Create the Given Free Table
CREATE TABLE GIVEN FREE
 GoldPID CHAR(4) NOT NULL,
 CardStoreID INT NOT NULL,
 CardUniqID INT NOT NULL,
 VoucherID INT NOT NULL,
 VoucherIssueStoreID INT NOT NULL,
 CONSTRAINT GIVEN FREE PPK
   PRIMARY KEY(GoldPID, CardStoreID, CardUniqID, VoucherID, VoucherIssueStoreID),
 CONSTRAINT GIVEN FREE FRK1
   FOREIGN KEY (GoldPID, CardStoreID, CardUniqID) REFERENCES GOLD CUST(GoldPID,
CardStoreID, CardUniaID)
   ON DELETE NO ACTION ON UPDATE NO ACTION,
 CONSTRAINT GIVEN FREE FRK2
   FOREIGN KEY (VoucherID, VoucherIssueStoreID) REFERENCES VOUCHER (VoucherID,
IssueStoreID)
   ON DELETE NO ACTION ON UPDATE NO ACTION
);
GO
-- 30>Create the Works Table
CREATE TABLE WORKS
 EmployeePID CHAR(4) NOT NULL,
 StoreID INT NOT NULL,
 CONSTRAINT WORKS PPK
   PRIMARY KEY(EmployeePID, StoreID),
 CONSTRAINT WORKS FRK1
   FOREIGN KEY (EmployeePID) REFERENCES EMPLOYEE (EmployeePID)
   ON DELETE NO ACTION ON UPDATE NO ACTION,
 CONSTRAINT WORKS FRK2
   FOREIGN KEY (StoreID) REFERENCES STORE (StoreID)
   ON DELETE NO ACTION ON UPDATE NO ACTION
);
GO
-- 31>Create the Online Order Table
CREATE TABLE ONLINE ORDER
 OnlinePID CHAR(4) NOT NULL,
 ProductID INT NOT NULL,
 OnlineBillID INT NOT NULL UNIQUE,
 BillAmount INT NOT NULL,
 DatePurchase DATE NOT NULL,
 PaymentMethod VARCHAR(10) NOT NULL,
 CONSTRAINT ONLINE ORDER PPK
   PRIMARY KEY(OnlinePID, ProductID, OnlineBillID),
 CONSTRAINT ONLINE ORDER FRK1
   FOREIGN KEY (OnlinePID) REFERENCES ONLINE CUST (OnlinePID)
   ON DELETE CASCADE ON UPDATE CASCADE,
 CONSTRAINT ONLINE ORDER FRK2
```

# FOREIGN KEY (ProductID) REFERENCES PRODUCT (ProductID) ON DELETE CASCADE ON UPDATE CASCADE,

```
);
GO
-- 32>Create the Store Order Table
CREATE TABLE STORE ORDER
  CashierPID CHAR(4) NOT NULL,
  StoreID INT NOT NULL,
  ProductID INT NOT NULL,
  PID CHAR(4) NOT NULL,
  StoreBillId INT NOT NULL UNIQUE,
  BillAmount INT NOT NULL,
  DatePurchase DATE NOT NULL,
  PaymentMethod VARCHAR(10) NOT NULL,
  CONSTRAINT STORE ORDER PPK
    PRIMARY KEY(CashierPID, StoreID, ProductID, PID, StoreBillId),
  CONSTRAINT STORE ORDER FRK1
    FOREIGN KEY (CashierPID) REFERENCES CASHIER (CashierPID)
    ON DELETE NO ACTION ON UPDATE NO ACTION,
  CONSTRAINT STORE ORDER FRK2
    FOREIGN KEY (StoreID) REFERENCES STORE CONTACT (StoreID)
    ON DELETE NO ACTION ON UPDATE NO ACTION,
  CONSTRAINT STORE ORDER FRK3
    FOREIGN KEY(ProductID) REFERENCES PRODUCT (ProductID)
    ON DELETE NO ACTION ON UPDATE NO ACTION,
  CONSTRAINT STORE ORDER FRK4
    FOREIGN KEY (PID) REFERENCES PERSON (PID)
    ON DELETE NO ACTION ON UPDATE NO ACTION
);
GO
DATA ENTRY:
-- Insert data in PERSON TABLE
INSERT INTO PERSON
VALUES
('P001','09-29-1997','Kunal', ", 'Mukherjee', 'Male'),
('P002','06-21-1950', 'Suraj', 'N', 'Kothawade', 'Male'),
('P003','01-26-1950', 'Diksha', 'O', 'GodBole', 'Female'),
('P004','08-15-1947', 'Erin', 'S', 'Leinenbach', 'Female'),
('P005','07-23-1990', 'Smita', ", 'Ghosh', 'Female'),
('P007','01-01-1990','James', 'F', 'Bond', 'Male'),
('P010','08-09-1997', 'Minal', 'w', 'Bonde', 'Female'),
('P011','02-17-1950','Abdul', 'K', 'Kalam', 'Male'),
('P012','04-16-1950','Narendra', 'D', 'Modi', 'Male');
GO
-- Insert data in PHONE NUMBER TABLE
INSERT INTO PHONE NUMBER
```

**VALUES** 

```
('P001', '8125503890'),
('P002', '8123546797'),
('P003', '8820893598'),
('P004', '2345046004'),
('P005', '7564990234'),
('P007', '9034758032'),
('P010', '2345043504'),
('P011', '8947789092'),
('P012', '3749823034');
GO
-- Insert data in PRSN ADDRESS TABLE
INSERT INTO PRSN ADDRESS
VALUES
('P001', 'TX', 'IRVING', 'COWBOYS PKWY'),
('P002', 'IL', 'EVANSVILLE', 'BAKER STREET'),
('P003', 'IN', 'PEORIA', 'STRIP RD'),
('P004', 'IL', 'CHICAGO', 'HWY 500'),
('P005', 'NM', 'DALLAS', 'JESSOR ROAD'),
('P007', 'MO', 'KOLKATA', 'SALT LAKE'),
('P010', 'NM', 'CHICAGO', 'MARY ROAD'),
('P011', 'IL', 'KOLKATA', 'LAMB 500'),
('P012', 'MO', 'DALLAS', 'SALT LAKE');
GO
-- Insert data in SILVER CUST TABLE
INSERT INTO SILVER CUST
VALUES
('P001', '10-25-2015'),
('P002', '10-22-2023'),
('P003', '06-29-2020');
GO
UPDATE SILVER CUST
SET DateOfJoin = '09-04-2010'
WHERE SILVER CUST.SilverPID='P003'
GO
-- Insert data in ONLINE CUST TABLE
INSERT INTO ONLINE CUST
VALUES
('P001', 'KXM6@UTDS.EDU'),
('P002', 'KU@ZAPAK.COM');
GO
-- Insert data in STORE TABLE
INSERT INTO STORE
VALUES
('123', 'BIGBAZAR', 'IL', 'EVANVILLE', 'BAKER ST'),
('124', 'KHOLS', 'TX', 'CHICAGO', 'GULL ST'),
('125', 'WALMART', 'AZ', 'DALLAS', 'FILL ST'),
('126', 'KROGER', 'MI', 'PEORIA', 'TABLE ST'),
('127', 'TARGET', 'FL', 'NOVI', 'MOSS ST');
```

```
-- Insert data in STORE CONTACT TABLE
INSERT INTO STORE CONTACT
VALUES
('123', '8125503890'),
('124', '8123546797'),
('125', '8820893598'),
('126', '2345046004'),
('127', '7564990234');
GO
-- Insert data in SALE TABLE
INSERT INTO SALE
VALUES
('10', '123', '24', 'FOOD', '09-29-2020'),
('11', '124', '24', 'FOOD', '09-12-2020'),
('12', '125', '25', 'TV', '09-06-2020'),
('13', '125', '26', 'XBOX', '02-29-2020');
GO
-- Insert data in VOUCHER TABLE
INSERT INTO VOUCHER
VALUES
('1009', '125'),
('1010', '125'),
('1011', '126'),
('1012', '127'),
('1013', '125'),
('1014', '127'),
('1015', '125'),
('1016', '125'),
('1017', '127'),
('1018', '125'),
('1019', '125'),
('1020', '127'),
('1021', '127');
GO
-- Insert data in PROMOTION TABLE
INSERT INTO PROMOTION
VALUES
('510','1009', '125', 1, '10% OFF'),
('511','1010', '125', 1, '20% OFF'),
('512','1012', '127', 1, '30% OFF');
GO
-- Insert data in GOLD CUST TABLE
INSERT INTO GOLD_CUST
VALUES
('P001','123', '9002', 'FUEL50OFF', '09-06-2010', '05-06-2020'),
('P003','125', '9003', 'PIZZA10OFF', '01-06-2010', '03-04-2020'),
```

```
('P007','123', '9000', 'FUEL50OFF', '09-06-2010', '05-06-2020'),
('P005','125', '9001', 'PIZZA10OFF', '01-06-2010', '03-04-2020'),
('P011','127', '9004', 'WATCH10OFF', '05-06-2015', '05-08-2020');
GO
UPDATE GOLD CUST
SET CardIssueDate = '06-10-2010'
WHERE GoldPID = 'P011'
GO
-- Insert data in NON ONLINE CUST TABLE
INSERT INTO NON ONLINE_CUST
VALUES
('P001', 'P001', '123', '9002')
GO
INSERT INTO NON ONLINE CUST ([NonOnlinePID])
VALUES
('P002')
GO
-- Insert data in EMPLOYEE TABLE
INSERT INTO EMPLOYEE
VALUES
('P011','06-07-2010', 'Manager', 'P011','127', '9004')
INSERT INTO EMPLOYEE ([EmployeePID],[CurrStartDate],[CurrDesignation])
VALUES
('P010','09-09-2015', 'Cashier'),
('P012','08-16-2016', 'FloorStaff')
GO
UPDATE EMPLOYEE
SET CurrStartDate = '03-11-2019'
WHERE EmployeePID = 'P010'
GO
-- Insert data in PAY TABLE
INSERT INTO PAY
VALUES
('P010',15,'06-07-2010'),
('P010',02,'06-08-2010'),
('P010',12,'06-09-2010'),
('P011',34,'07-10-2010'),
('P011',23,'07-09-2010'),
('P011',12,'07-08-2010'),
('P012',11,'06-12-2010'),
('P012',12,'06-13-2010'),
('P012',02,'06-14-2010'),
('P010',12,'04-11-2010'),
('P010',34,'04-12-2010'),
('P010',23,'04-13-2010'),
('P010',12,'04-14-2010'),
('P010',11,'04-15-2010'),
('P010',12,'04-16-2010'),
```

```
('P010',02,'04-17-2010'),
('P010',12,'04-11-2020'),
('P010',34,'04-12-2020'),
('P010',23,'04-13-2020'),
('P010',12,'04-14-2020'),
('P010',11,'04-15-2020'),
('P010',12,'04-16-2020'),
('P010',02,'04-17-2020');
GO
-- Insert data in PAST DESIGNATION TABLE
INSERT INTO PAST DESIGNATION
VALUES
('P010','07-07-2006','Cashier'),
('P010','01-07-2005','FloorStaff'),
('P011','02-03-2009','FloorStaff');
GO
-- Insert data in CASHIER TABLE
INSERT INTO CASHIER
VALUES
('P010')
GO
-- Insert data in MANAGER TABLE
INSERT INTO MANAGER
VALUES
('P011')
GO
-- Insert data in FLOOR STAFF TABLE
INSERT INTO FLOOR STAFF
VALUES
('P012')
GO
-- Insert data in AISLE TABLE
INSERT INTO AISLE
VALUES
('3800'),
('3801'),
('3802'),
('3803'),
('3804')
GO
-- Insert data in AISLE INFO TABLE
INSERT INTO AISLE INFO
VALUES
('3800',1,1),
('3800',1,2),
('3801',1,1),
```

```
('3801',1,2),
('3801',1,3)
GO
-- Insert data in SUPPLIER TABLE
INSERT INTO SUPPLIER
VALUES
('41','VIMAL','KOLKATA', '5647821287'),
('42','CAPAK','DERJELING','9038592480'),
('43','DELL','SEOUL', '0192783409'),
('44','HP','MUMBAI', '9082349865'),
('45','BP','DHARAVI', '2359875467')
GO
-- Insert data in PRODUCT TABLE
INSERT INTO PRODUCT
VALUES
('451','12','FOOD', 'YES', '41'),
('452','34','GAS','NO','44'),
('453','86','FOOD', 'YES','43'),
('454','46','GAS', 'YES','44'),
('455','45','MOVIE','NO','42'),
('456','0','FOOD', 'NO', '41');
GO
-- Insert data in PERI PRODUCT TABLE
INSERT INTO PERI PRODUCT
VALUES
('451', '02-27-2020'),
('452', '03-17-2020'),
('453','05-27-2026')
GO
-- Insert data in NON PERI PRODUCT TABLE
INSERT INTO NON PERI PRODUCT
VALUES
('454'),
('455')
GO
-- Insert data in SUPPLY DATE TABLE
INSERT INTO SUPPLY DATE
VALUES
('452', '44', '02-2-2020'),
('452', '44', '04-15-2020'),
('452', '44', '08-15-2019'),
('455', '44', '03-24-2020'),
('455', '44', '03-25-2020'),
('455', '44', '03-26-2020'),
('453', '44', '03-27-2020'),
('453', '42', '03-28-2020'),
```

('453', '42', '03-29-2020'),

```
('451', '42', '03-30-2020'),
('451', '42', '04-01-2020'),
('454', '41', '04-01-2020');
-- Insert data in ARRANGEMENT TABLE
INSERT INTO ARRANGEMENT
VALUES
('451', 'P012', '3800','03-15-2020'),
('452', 'P012', '3802','04-17-2020'),
('453', 'P012', '3803', '03-07-2020'),
('455', 'P012', '3803', '03-15-2021')
GO
-- Insert data in BUY TABLE
INSERT INTO BUY
VALUES
('P002', '1009', '125', '02-2-2020'),
('P002', '1011', '126', '04-15-2020'),
('P002', '1012', '127', '08-15-2019'),
('P002', '1013', '125', '03-24-2020'),
('P002', '1014', '127', '03-25-2020'),
('P002', '1015', '125', '03-26-2020'),
('P002', '1016', '125', '03-27-2020'),
('P002', '1017', '127', '03-28-2020'),
('P002', '1018', '125', '03-29-2020'),
('P002', '1019', '125', '03-30-2020'),
('P002', '1020', '127', '04-01-2020'),
('P002', '1021', '127', '04-01-2020'),
('P001', '1018', '125', '03-29-2020');
GO
-- Insert data in ASSIGNMENT TABLE
INSERT INTO ASSIGNMENT
VALUES
('P010','3800','123','04-07-2020'),
('P010','3802','123','04-08-2020'),
('P011','3800','123','04-10-2020'),
('P011','3802','123','04-09-2020'),
('P012','3803','124','04-12-2020'),
('P012','3804','124','04-13-2020'),
('P010','3800','126','04-08-2020'),
('P012','3800','126','04-08-2020');
GO
-- Insert data in GIVEN FREE TABLE
INSERT INTO GIVEN FREE
VALUES
('P001','123', '9002', '1009', '125'),
('P003','125', '9003', '1012', '127'),
('P007','123', '9000', '1010', '125'),
('P005','125', '9001', '1011', '126'),
('P011','127', '9004', '1011', '126')
```

```
-- Insert data in WORKS TABLE
INSERT INTO WORKS
VALUES
('P011', '123'),
('P010', '123'),
('P012', '125')
GO
-- Insert data in ONLINE ORDER TABLE
INSERT INTO ONLINE ORDER
VALUES
('P001', '451', 1, 12, '06-07-2010', 'Master'),
('P002', '452', 2, 435, '06-08-2010', 'Visa'),
('P001', '452', 3, 67, '06-08-2010', 'Visa'),
('P002', '453', 4, 234, '06-09-2010', 'Master'),
('P001', '453', 5, 345, '06-09-2010', 'Master'),
('P001', '454', 6, 234, '06-10-2010', 'Visa'),
('P001', '454', 7, 100, '06-11-2010', 'Visa')
GO
-- Insert data in STORE ORDER TABLE
INSERT INTO STORE ORDER
VALUES
('P010', '123', 451,'P001',1, 12, '02-07-2010', 'Master'),
('P010', '123', 455, 'P002', 2, 435, '03-11-2010', 'Visa'),
('P010', '125', 451, 'P001', 3, 67, '02-12-2010', 'Visa'),
('P010', '126', 454,'P003',4, 234, '03-09-2010', 'Master'),
('P010', '123', 454,'P001',5, 345, '04-10-2010', 'Master'),
('P010', '126', 452, 'P001', 6, 234, '05-08-2010', 'Visa'),
('P010', '125', 452,'P005', 7, 100, '02-09-2010', 'Visa'),
('P010', '123', 451, 'P001', 8, 12, '02-07-2019', 'Master'),
('P010', '123', 455, 'P002', 9, 435, '03-11-2019', 'Visa'),
('P010', '125', 451, 'P001', 10, 67, '02-12-2019', 'Visa'),
('P010', '126', 454,'P003',11, 234, '03-09-2019', 'Master'),
('P010', '123', 454, 'P001', 12, 345, '04-10-2019', 'Master'),
('P010', '126', 452,'P001',13, 234, '05-08-2019', 'Visa'),
('P010', '125', 452,'P005',14, 100, '02-09-2019', 'Visa'),
('P010', '123', 451, 'P001', 15, 12, '02-07-2019', 'Master'),
('P010', '123', 454,'P001',16, 345, '04-10-2019', 'Master'),
('P010', '126', 452, 'P001', 17, 234, '05-08-2019', 'Visa'),
('P010', '125', 451, 'P001', 18, 67, '02-12-2019', 'Visa'),
('P010', '123', 454,'P001',19, 345, '04-10-2019', 'Master'),
('P010', '126', 452, 'P001', 20, 234, '05-08-2019', 'Visa'),
('P010', '123', 454,'P001',21, 345, '04-10-2019', 'Master'),
('P010', '126', 452, 'P001', 22, 234, '05-08-2019', 'Visa'),
('P010', '123', 454,'P001',23, 345, '04-10-2019', 'Master'),
('P010', '126', 452, 'P001', 24, 234, '05-08-2019', 'Visa'),
('P010', '123', 454,'P001',25, 345, '04-10-2019', 'Master'),
('P010', '126', 452, 'P001', 26, 234, '05-08-2019', 'Visa'),
```

('P010', '126', 451,'P004',27, 12, '08-08-2019', 'Visa'),

('P010', '123', 452,'P004',28, 798, '04-15-2019', 'Master'), ('P010', '126', 453,'P004',29, 443, '03-08-2019', 'Master'), ('P010', '126', 452,'P004',30, 43, '01-08-2019', 'Master') GO