

Tofig Gasimov

Completion date: July 7, 2020

Individual Project: *Database for Inventory Tracking System*

i. Business Problem

Many living necessities are quickly being sold out from the shelves of local stores and going into physical locations is becoming increasingly dangerous due to the COVID-19 pandemic. Businesses are being overrun with demand for certain products while people in need are risking their lives to show up and come away empty handed.

ii. Requirements

Retail stores require a database to track its inventory and production operations in synchronization with its customers to be able to quickly see how many of these necessary items are available and the time at which they can be expected to be restocked. This is in order to ensure the safety and convenience of customers, as well as making stores inventory information more easily accessible and organized.

(All SQL statements can be found in separate txt file)

Table create statements

#1 Customer

```
CREATE TABLE CUSTOMER_T
  (CustomerID int identity(1,1) NOT NULL PRIMARY KEY,
   CustomerFirstName varchar(20) NOT NULL,
   CustomerLastName varchar(20) NOT NULL,
   DateOfBirth varchar(12) NULL,
   EmailAddress varchar(35) NOT NULL,
   CustomerStreet varchar(30) NOT NULL,
   CustomerCity varchar(25) NOT NULL,
   CustomerState char(2) NOT NULL,
   CustomerCountry varchar(30) NOT NULL,
   CustomerZip char(5) NOT NULL,
   PhoneNumber varchar(15) NULL,
   LastUpdatedBy varchar(20) NOT NULL,
   LastUpdated datetime NOT NULL,
);
```

#2 Product

```
CREATE TABLE PRODUCT_T
  (ProductID int identity(1,1) NOT NULL PRIMARY KEY,
   ProductName varchar(100) NOT NULL,
   InventoryProcessed int NOT NULL,
   InventorySold int NOT NULL,
   Price varchar(10) NOT NULL,
   ExpirationDate varchar(12) NULL,
   Description varchar(50) NOT NULL,
   LastUpdatedBy varchar(20) NOT NULL,
   LastUpdated datetime NOT NULL,
);
```

3 Product Category

```
CREATE TABLE PRODUCT_CATEGORY_T
  (CategoryID int NOT NULL PRIMARY KEY,
   CategoryName varchar(50) NULL,
   Description varchar(50) NULL,
   ProductID int FOREIGN KEY REFERENCES PRODUCT_T(ProductID),
   LastUpdatedBy varchar(20) NOT NULL,
   LastUpdated datetime NOT NULL,
);
```

4 Warehouse

```
CREATE TABLE WAREHOUSE_T
  (WarehouseID int identity(1,1) NOT NULL PRIMARY KEY,
   WarehouseStreet varchar(30) NOT NULL,
   WarehouseCity varchar(25) NOT NULL,
   WarehouseState char(2) NOT NULL,
   WarehouseCountry varchar(30) NOT NULL,
   WarehouseZip varchar(5) NOT NULL,
   PhoneNumber varchar(15) NOT NULL,
   LastUpdatedBy varchar(20) NOT NULL,
   LastUpdated datetime NOT NULL,
);
```

5 Supplier

```

CREATE TABLE SUPPLIER_T
    (SupplierID int identity(1,1) NOT NULL PRIMARY KEY,
    SupplierStreet varchar(30) NOT NULL,
    SupplierCity varchar(25) NOT NULL,
    SupplierState char(2) NOT NULL,
    SupplierCountry varchar(30) NOT NULL,
    SupplierZip varchar(5) NOT NULL,
    EmailAddress varchar(25) NOT NULL,
    PhoneNumber varchar(15) NOT NULL,
    CompanyName varchar(20) NOT NULL,
    WarehouseID int FOREIGN KEY REFERENCES WAREHOUSE_T(WarehouseID),
    LastUpdatedBy varchar(20) NOT NULL,
    LastUpdated datetime NOT NULL,
);

```

6 Shipment

```

CREATE TABLE SHIPMENT_T
    (ShipmentID int identity(1,1) NOT NULL PRIMARY KEY,
    SupplierProduct varchar(40) NOT NULL,
    SupplierID int FOREIGN KEY REFERENCES SUPPLIER_T(SupplierID),
    LastUpdatedBy varchar(20) NOT NULL,
    LastUpdated datetime NOT NULL,
);

```

7 Store

```

CREATE TABLE STORE_T
    (StoreID int identity(1,1) NOT NULL PRIMARY KEY,
    StoreStreet varchar(20) NOT NULL,
    StoreCity varchar(25) NOT NULL,
    StoreState char(2) NOT NULL,
    StoreCountry varchar(30) NOT NULL,
    StoreZip varchar(5) NOT NULL,
    StoreName varchar(50) NOT NULL,
    OpenTime varchar(8) NOT NULL,
    CloseTime varchar(8) NOT NULL,
    ShipmentID int FOREIGN KEY REFERENCES SHIPMENT_T(ShipmentID),
    LastUpdatedBy varchar(20) NOT NULL,
    LastUpdated datetime NOT NULL,
);

```

8 Department

```

CREATE TABLE DEPARTMENT_T
    (DepartmentID int identity(1,1) NOT NULL PRIMARY KEY,
    DepartmentName varchar(40) NOT NULL,
    StoreID int FOREIGN KEY REFERENCES STORE_T(StoreID),
    LastUpdatedBy varchar(20) NOT NULL,
    LastUpdated datetime NOT NULL,
);

```

9 Employee**CREATE TABLE EMPLOYEE_T**

```

(EmployeeID int identity(1,1) NOT NULL PRIMARY KEY,
EmployeeFirstName varchar(20) NOT NULL,
EmployeeLastName varchar(20) NOT NULL,
DateOfBirth varchar(12) NULL,
EmployeeStreet varchar(20) NOT NULL,
EmployeeCity char(25) NOT NULL,
EmployeeState char(2) NOT NULL,
EmployeeCountry varchar(30) NOT NULL,
EmployeeZip varchar(5) NOT NULL,
EmailAddress varchar(35) NULL,
SupervisorID int NULL,
DepartmentID int FOREIGN KEY REFERENCES DEPARTMENT_T(DepartmentID),
LastUpdatedBy varchar(20) NOT NULL,
LastUpdated datetime NOT NULL,
);

```

10 Employee Skill**CREATE TABLE EMPLOYEE_SKILL_T**

```

(EmployeeID int identity(1,1) FOREIGN KEY REFERENCES EMPLOYEE_T(EmployeeID),
Skill varchar(50) NULL,
LastUpdatedBy varchar(20) NOT NULL,
LastUpdated datetime NOT NULL,
);

```

11 Order**CREATE TABLE ORDER_T**

```

(OrderNumber varchar(15) NOT NULL PRIMARY KEY,
OrderDate varchar(12) NOT NULL,
ShipmentAddress varchar(40) NOT NULL,
CustomerID int FOREIGN KEY REFERENCES CUSTOMER_T(CustomerID),
EmployeeID int FOREIGN KEY REFERENCES EMPLOYEE_T(EmployeeID),
LastUpdatedBy varchar(20) NOT NULL,
LastUpdated datetime NOT NULL,
);

```

12 Order Detail**CREATE TABLE ORDER_DETAIL_T**

```

(OrderNumber varchar(15) FOREIGN KEY REFERENCES ORDER_T(OrderNumber),
Price varchar(10) NOT NULL,
Quantity int NOT NULL,
ProductID int FOREIGN KEY REFERENCES PRODUCT_T(ProductID),
LastUpdatedBy varchar(20) NOT NULL,
LastUpdated datetime NOT NULL,
);

```

Insert Statements

```

INSERT INTO CUSTOMER_T VALUES ('John', 'Marshal', NULL, 'john123@gmail.com', '1052 Marshal Ln',
'Richmond', 'VA', 'United States', '21802', NULL, 'Tofig Gasimov', CURRENT_TIMESTAMP)
INSERT INTO CUSTOMER_T VALUES ('Tofig', 'Gasimov', '12/20/1998', 'gasimov98@gmail.com', '1067 Devon
Ln', 'Harrisonburg', 'VA', 'United States', '22801', '540-209-5969', 'Tofig Gasimov', CURRENT_TIMESTAMP)
INSERT INTO CUSTOMER_T VALUES ('Carl', 'Dough', NULL, 'dough98@gmail.com', '1054 Devon Ln',
'Harrisonburg', 'VA', 'United States', '22801', '540-209-5556', 'Tofig Gasimov', CURRENT_TIMESTAMP)
INSERT INTO CUSTOMER_T VALUES ('Maga', 'Barella', '06/15/1994', 'barella94@gmail.com', '1040 Shovket
Ln', 'Norfolk', 'VA', 'United States', '23804', '540-209-5767', 'Tofig Gasimov', CURRENT_TIMESTAMP)
INSERT INTO CUSTOMER_T VALUES ('Jessica', 'Gurban', '12/12/1993', 'gurban93@gmail.com', '1050 Fox Ln',
'Harrisonburg', 'VA', 'United States', '22801', '540-209-5333', 'Tofig Gasimov', CURRENT_TIMESTAMP)
INSERT INTO CUSTOMER_T VALUES ('Sally', 'Romary', '03/22/1995', 'romary12@gmail.com', '1067 Squire
Ln', 'Roanoke', 'VA', 'United States', '24805', '540-209-5464', 'Tofig Gasimov', CURRENT_TIMESTAMP)
INSERT INTO CUSTOMER_T VALUES ('Merry', 'Donald', NULL, 'donald155@gmail.com', '1065 Squire Ln',
'Roanoke', 'VA', 'United States', '24805', '540-209-2565', 'Tofig Gasimov', CURRENT_TIMESTAMP)
INSERT INTO CUSTOMER_T VALUES ('Karen', 'Duck', '11/04/1990', 'karen78@gmail.com', '1057 Devon Ln',
'Harrisonburg', 'VA', 'United States', '22801', '540-209-1272', 'Tofig Gasimov', CURRENT_TIMESTAMP)
INSERT INTO CUSTOMER_T VALUES ('Anna', 'Karenina', '12/20/1994', 'karenina@gmail.com', '1065 Devon
Ln', 'Harrisonburg', 'VA', 'United States', '22801', '540-209-7565', 'Tofig Gasimov', CURRENT_TIMESTAMP)
INSERT INTO CUSTOMER_T VALUES ('Carl', 'Charleston', '10/18/1998', 'carl98@gmail.com', '1054 Lois Ln',
'Harrisonburg', 'VA', 'United States', '22801', '540-209-2777', 'Tofig Gasimov', CURRENT_TIMESTAMP)
INSERT INTO CUSTOMER_T VALUES ('Kenne', 'Garla', '10/18/1995', 'garla98@gmail.com', '1032 Lois Ln',
'Harrisonburg', 'VA', 'United States', '22801', '540-210-2777', 'Tofig Gasimov', CURRENT_TIMESTAMP)
INSERT INTO CUSTOMER_T VALUES ('Kanye', 'West', '10/18/1992', 'gracias98@gmail.com', '1032 Davon Ln',
'Harrisonburg', 'VA', 'United States', '22801', '540-205-2777', 'Tofig Gasimov', CURRENT_TIMESTAMP)

```

```

INSERT INTO PRODUCT_T VALUES ('Aburel Hand Sanitizer', 5, 3, '$ 7.59', NULL, 'Anti-bacterial hand
sanitizer for hand', 'Tofig Gasimov', CURRENT_TIMESTAMP)
INSERT INTO PRODUCT_T VALUES ('High Hand Wipes', 5, 3, '$ 5.59', NULL, 'Anti-bacterial wipes for
sanitizing hands', 'Tofig Gasimov', CURRENT_TIMESTAMP)
INSERT INTO PRODUCT_T VALUES ('Nurofen Liquid Powder', 6, 4, '$ 4.79', '12/20/2022', 'Immune boosting
liquid powder', 'Tofig Gasimov', CURRENT_TIMESTAMP)
INSERT INTO PRODUCT_T VALUES ('Strepsils candy', 7, 5, '$ 10.59', '11/03/2023', 'Candy for sore throat', 'Tofig
Gasimov', CURRENT_TIMESTAMP)
INSERT INTO PRODUCT_T VALUES ('Nightquil', 8, 6, '$ 12.49', '12/12/2021', 'Medicine for cold and flu', 'Tofig
Gasimov', CURRENT_TIMESTAMP)

```

```

INSERT INTO PRODUCT_CATEGORY_T VALUES (1, 'Antiseptic Hand Washes', 'Hand sanitizers', 1, 'Tofig
Gasimov', CURRENT_TIMESTAMP)
INSERT INTO PRODUCT_CATEGORY_T VALUES (2, 'Antiseptic Hand Washes', 'Hand Wipes', 2, 'Tofig
Gasimov', CURRENT_TIMESTAMP)
INSERT INTO PRODUCT_CATEGORY_T VALUES (3, 'Pharmaceutical medicine', 'Fever', 3, 'Tofig
Gasimov', CURRENT_TIMESTAMP)
INSERT INTO PRODUCT_CATEGORY_T VALUES (4, 'Pharmaceutical medicine', 'Sore throat', 4, 'Tofig
Gasimov', CURRENT_TIMESTAMP)
INSERT INTO PRODUCT_CATEGORY_T VALUES (5, 'Pharmaceutical medicine', 'Fever', 5, 'Tofig
Gasimov', CURRENT_TIMESTAMP)

```

```

INSERT INTO WAREHOUSE_T VALUES ('1055 Port Republic Rd', 'Richmond', 'VA', 'United States', '21802',
'540-209-0647','Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO WAREHOUSE_T VALUES ('1050 Anabell Ln', 'Norfolk', 'VA', 'United States', '23804', '540-278-
8960','Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO WAREHOUSE_T VALUES ('1070 North Folk Ln', 'Harrisonburg', 'VA', 'United States', '22801',
'540-250-6575','Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO WAREHOUSE_T VALUES ('1044 Southview Ln', 'Roanoke', 'VA', 'United States', '24805', '540-
208-8505','Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO WAREHOUSE_T VALUES ('1076 Newsome Ln', 'Harrisonburg', 'VA', 'United States', '22801',
'540-608-5567','Tofig Gasimov',CURRENT_TIMESTAMP)

```

```

INSERT INTO SUPPLIER_T VALUES ('1049 Alibath Ln', 'Richmond', 'VA', 'United States', '21802',
'alibath@gmail.com','540-340-6556','Mercke',1,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO SUPPLIER_T VALUES ('1045 Aglamali Ln', 'Norfolk', 'VA', 'United States', '23804',
'aglamali12@gmail.com','540-409-4556','CVSE',2,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO SUPPLIER_T VALUES ('1047 Republic Rd', 'Harrisonburg', 'VA', 'United States', '22801',
'repub12@gmail.com','540-209-9665','WHO',3,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO SUPPLIER_T VALUES ('1038 Fox Ln', 'Roanoke', 'VA', 'United States', '24805',
'foxhill155@gmail.com','540-225-2565','CSSE',4,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO SUPPLIER_T VALUES ('1077 Squirrel Ln', 'Harrisonburg', 'VA', 'United States', '22801',
'squireel55@gmail.com','540-210-6556','EPSS',5,'Tofig Gasimov',CURRENT_TIMESTAMP)

```

```

INSERT INTO SHIPMENT_T VALUES ('Aburel Hand Sanitizer',1,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO SHIPMENT_T VALUES ('High Hand Wipes',2,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO SHIPMENT_T VALUES ('Nurofen Liquid Powder',3,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO SHIPMENT_T VALUES ('Strepsils candy',4,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO SHIPMENT_T VALUES ('Nightquill',5,'Tofig Gasimov',CURRENT_TIMESTAMP)

```

```

INSERT INTO STORE_T VALUES ('1044 Agdamli Ln', 'Richmond', 'VA', 'United States', '21802', 'Ban
grocery','09:00am','05:00pm',1,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO STORE_T VALUES ('1025 South Folk Ln', 'Norfolk', 'VA', 'United States', '23804', 'Pean
Grocery','09:00am','08:00pm',2,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO STORE_T VALUES ('1065 North Square Ln', 'Harrisonburg', 'VA', 'United States', '22801', 'Walm
Grocery','09:00am','08:00pm',3,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO STORE_T VALUES ('1043 Aygul Ln', 'Roanoke', 'VA', 'United States', '24805', 'WMO
Grocery','09:00am','09:00pm',4,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO STORE_T VALUES ('1023 Washington Ln', 'Harrisonburg', 'VA', 'United States', '22801','HBS
Grocery','09:00am','09:00pm',5,'Tofig Gasimov',CURRENT_TIMESTAMP)

```

```

INSERT INTO DEPARTMENT_T VALUES ('Health',1,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO DEPARTMENT_T VALUES ('Health',2,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO DEPARTMENT_T VALUES ('Health',3,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO DEPARTMENT_T VALUES ('Health',4,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO DEPARTMENT_T VALUES ('Health',5,'Tofig Gasimov',CURRENT_TIMESTAMP)

```

```

INSERT INTO EMPLOYEE_T VALUES ('James','Butt',NULL,'1062 Lais Ln', 'Richmond', 'VA', 'United States',
'21802','jbutt@gmail.com',15678,1,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Josephine','Darakjy','07/12/1990','1032 Davon Ln', 'Richmond', 'VA',
'United States', '21802','darakjy@darakjy.org',NULL,1,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Art','Venere', '05/05/1993','1052 Hetcbek Ln', 'Richmond', 'VA', 'United
States', '21802','art@venere.org',NULL,1,'Tofig Gasimov',CURRENT_TIMESTAMP)

```

```

INSERT INTO EMPLOYEE_T VALUES ('Lenna','Paprocki', NULL,'1072 Sedan Ln', 'Norfolk', 'VA', 'United
States', '23804','lpaprocki@hotmail.com',NULL,2,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Donette','Foller','06/07/1989','1055 Amaras Ln', 'Norfolk', 'VA', 'United
States', '23804','donette.foller@cox.net',16789,2,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Simona','Morasca','12/12/1990','1072 Hele Ln', 'Norfolk', 'VA', 'United
States', '23804','simona@morasca.com',NULL,2,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Mitsue','Tollner',NULL,'1032 Aygulla Ln', 'Harrisonburg', 'VA', 'United
States', '22801','tollner@yahoo.com',NULL,3,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Leota','Dilliard',NULL,'1076 Bele Ln', 'Harrisonburg', 'VA', 'United
States', '22801','leota@hotmail.com',13457,3,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Sage','Wieser','03/02/1985','1098 Night Ln', 'Harrisonburg', 'VA',
'United States', '22801','sage_wieser@cox.net',NULL,3,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Kris','Marrier','05/07/1990','1189 South Ln', 'Roanoke', 'VA', 'United
States', '24805','kris@gmail.com',NULL,4,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Graciela','Ruta','03/07/1985','1225 Ora Ln', 'Roanoke', 'VA', 'United
States', '24805','minna_amigon@yahoo.com',NULL,4,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Cammy','Albares','08/09/1990','1165 Kian Ln', 'Roanoke', 'VA', 'United
States', '24805','amaclead@gmail.com',12905,4,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Mattie','Poquette',NULL,'1150 Besdi Ln', 'Roanoke', 'VA', 'United
States', '24805','caldarera@aol.com',NULL,4,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Meaghem','Garufi','12/05/1984','1245 Heledi Ln', 'Richmond', 'VA',
'United States', '21802','gruta@cox.net',NULL,1,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Gladys','Garufi','12/01/1990','1678 Buralar Ln', 'Richmond', 'VA',
'United States', '21802','calbares@gmail.com',NULL,1,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Yuki','Whobrey','12/07/1990','1890 Alama Ln', 'Harrisonburg', 'VA',
'United States', '22801','mattie@aol.com',NULL,5,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Alisha','Slurski','12/05/1982','1989 Eleme Ln', 'Harrisonburg', 'VA',
'United States', '22801','meaghan@hotmail.com',11565,5,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_T VALUES ('Bette','Nicka','12/05/1990','1879 Worriland Ln', 'Harrisonburg', 'VA',
'United States', '22801','gladys.rim@rim.org',NULL,5,'Tofig Gasimov',CURRENT_TIMESTAMP)

```

```

INSERT INTO EMPLOYEE_SKILL_T VALUES('Analyzing quantitative data','Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Decision making and problem solving','Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Creating and editing written reports','Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Critical thinking','Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Working well in a team','Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Creating and editing written reports','Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Critical thinking','Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Decision making and problem solving','Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Creating and editing written reports','Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Analyzing quantitative data','Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Decision making and problem solving','Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Creating and editing written reports','Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Analyzing quantitative data','Tofig
Gasimov',CURRENT_TIMESTAMP)

```

```

INSERT INTO EMPLOYEE_SKILL_T VALUES('Creating and editing written reports','Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Working well in a team','Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Analyzing quantitative data','Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Creating and editing written reports','Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO EMPLOYEE_SKILL_T VALUES('Decision making and problem solving','Tofig
Gasimov',CURRENT_TIMESTAMP)

```

```

INSERT INTO ORDER_T VALUES ('09ab76cd','07/05/2020','1052 Marshal Ln',1,1,'Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_T VALUES ('07adb67n','07/04/2020','1067 Devon Ln',2,8,'Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_T VALUES ('08hayg89','07/05/2020','1054 Devon Ln',3,8,'Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_T VALUES ('67hs65af','07/04/2020','1040 Shovket Ln',4,5,'Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_T VALUES ('78cjd89','07/05/2020','1050 Fox Ln',5,8,'Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_T VALUES ('54acd76h','07/04/2020','1067 Squire Ln',6,12,'Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_T VALUES ('43asrthc','07/04/2020','1065 Squire Ln',7,12,'Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_T VALUES ('45aseg56','07/05/2020','1057 Devon Ln',8,17,'Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_T VALUES ('03frth56','07/04/2020','1065 Devon Ln',9,17,'Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_T VALUES ('08thy67n','07/04/2020','1052 Lois Ln',10,17,'Tofig
Gasimov',CURRENT_TIMESTAMP)

```

```

INSERT INTO ORDER_DETAIL_T VALUES ('09ab76cd','$ 7.59',1,1,'Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_DETAIL_T VALUES ('07adb67n','$ 5.59',2,2,'Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_DETAIL_T VALUES ('08hayg89','$ 7.59',2,1,'Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_DETAIL_T VALUES ('67hs65af','$ 4.79',1,3,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_DETAIL_T VALUES ('78cjd89','$ 10.59',2,4,'Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_DETAIL_T VALUES ('54acd76h','$ 12.49',1,5,'Tofig
Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_DETAIL_T VALUES ('43asrthc','$ 5.59',2,2,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_DETAIL_T VALUES ('45aseg56','$ 4.79',1,3,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_DETAIL_T VALUES ('03frth56','$ 5.59',2,2,'Tofig Gasimov',CURRENT_TIMESTAMP)
INSERT INTO ORDER_DETAIL_T VALUES ('08thy67n','$ 12.49',1,5,'Tofig
Gasimov',CURRENT_TIMESTAMP)

```


Transactions

1) Updating Last name of Customer whose customerid=3

```
UPDATE CUSTOMER_T  
SET CustomerLastName='Carleone'  
WHERE CustomerID=4;
```

2) Deleting row from Employee Skill table where Employee ID = 3

```
DELETE FROM EMPLOYEE_SKILL_T WHERE EmployeeID=3;
```

3) Adding a new column to Customer table named as OrderConfirmNumber

```
ALTER TABLE CUSTOMER_T  
ADD OrderConfirmNumber varchar(10);
```

4) Modifying data type of EmailAddress from Employee Table

```
ALTER TABLE EMPLOYEE_T ALTER COLUMN EmailAddress varchar(50);
```

5) Deleting column from Customer table named as OrderConfirmNumber

```
ALTER TABLE CUSTOMER_T DROP COLUMN OrderConfirmNumber;
```

Queries

1) Inner Join with two tables:

Description: The Inner join joins and lists two tables-Order and Customer according to the matching value of CustomerID in both tables with fields like Order Number and Customer name (First and Last).

```
SELECT OrderNumber, concat(CustomerFirstName, ' ', CustomerLastName) AS Customer
FROM CUSTOMER_T
INNER JOIN ORDER_T
ON ORDER_T.CustomerID = CUSTOMER_T.CustomerID;
```

	OrderNumber	Customer
1	09ab76cd	John Marshal
2	07adb67n	Tofig Gasimov
3	08hayg89	Carl Dough
4	67hs65af	Maga Barella
5	78cjd89	Jessica Gurban
6	54acd76h	Sally Romary
7	43asrthc	Merry Donald
8	45aseg56	Karen Duck
9	03frth56	Anna Karenina
10	08thy67n	Carl Charleston
11	NULL	Kenne Garla
12	NULL	Kanye West

2) Left Outer Join

Description: The Left Outer join joins and lists two tables-Order and Customer according to the matching value of CustomerID in both tables plus Customer IDs from the Customer table that do not match any Customer ID in the Order table with fields as Order Number and Customer name (First and Last).

```
SELECT OrderNumber, concat(CustomerFirstName, ' ', CustomerLastName) AS Customer
FROM CUSTOMER_T
LEFT JOIN ORDER_T
ON ORDER_T.CustomerID = CUSTOMER_T.CustomerID;
```

	OrderNumber	Customer
1	09ab76cd	John Marshal
2	07adb67n	Tofig Gasimov
3	08hayg89	Carl Dough
4	67hs65af	Maga Barella
5	78cjd89	Jessica Gurban
6	54acd76h	Sally Romary
7	43asrthc	Merry Donald
8	45aseg56	Karen Duck
9	03frth56	Anna Karenina
10	08thy67n	Carl Charleston
11	NULL	Kenne Garla
12	NULL	Kanye West

3) Union Query

Description: Combines and lists the result of selected fields from Customer table-First name, Last name, City, Country and Phone numbers of customers with the selected fields from Supplier table -Company name, City, Country and Phone numbers of suppliers.

```
SELECT 'Customer' As Type,
      CustomerFirstName + ' ' + CustomerLastName AS ContactName,
      CustomerCity AS City, CustomerCountry AS Country, PhoneNumber
FROM CUSTOMER_T
UNION
SELECT 'Supplier',
      CompanyName, SupplierCity, SupplierCountry, PhoneNumber
FROM SUPPLIER_T
```

	Type	ContactName	City	Country	PhoneNumber
1	Customer	Anna Karenina	Harrisonburg	United States	540-209-7565
2	Customer	Carl Charleston	Harrisonburg	United States	540-209-2777
3	Customer	Carl Dough	Harrisonburg	United States	540-209-5556
4	Customer	Jessica Gurban	Harrisonburg	United States	540-209-5333
5	Customer	John Marshal	Richmond	United States	NULL
6	Customer	Kanye West	Harrisonburg	United States	540-205-2777
7	Customer	Karen Duck	Harrisonburg	United States	540-209-1272
8	Customer	Kenne Garla	Harrisonburg	United States	540-210-2777
9	Customer	Maga Barella	Norfolk	United States	540-209-5767
10	Customer	Merry Donald	Roanoke	United States	540-209-2565
11	Customer	Sally Romary	Roanoke	United States	540-209-5464
12	Customer	Tofig Gasimov	Harrisonburg	United States	540-209-5969
13	Supplier	CSSE	Roanoke	United States	540-225-2565
14	Supplier	CVSE	Norfolk	United States	540-409-4556
15	Supplier	EPSS	Harrisonburg	United States	540-210-6556
16	Supplier	Mercke	Richmond	United States	540-340-6556
17	Supplier	WHO	Harrisonburg	United States	540-209-9665

4) Where clause

Description: Lists all rows from customer table whose city is Harrisonburg

SELECT * FROM CUSTOMER_T

WHERE CustomerCity='Harrisonburg';

CustomerID	CustomerFirstName	CustomerLastName	DateOfBirth	EmailAddress	CustomerStreet	CustomerCity	CustomerState	CustomerCountry	CustomerZip	PhoneNumber	LastUpdatedBy	LastUpdated
2	Tofig	Gasimov	12/20/1998	gasimov98@gmail.com	1067 Devon Ln	Harrisonburg	VA	United States	22801	540-209-5969	Tofig Gasimov	2022-02-22 15:12:07.027
3	Carl	Dough	NULL	dough98@gmail.com	1054 Devon Ln	Harrisonburg	VA	United States	22801	540-209-5556	Tofig Gasimov	2022-02-22 15:12:07.030
5	Jessica	Gurban	12/12/1993	gurban93@gmail.com	1050 Fox Ln	Harrisonburg	VA	United States	22801	540-209-5333	Tofig Gasimov	2022-02-22 15:12:07.030
8	Karen	Duck	11/04/1990	karen78@gmail.com	1057 Devon Ln	Harrisonburg	VA	United States	22801	540-209-1272	Tofig Gasimov	2022-02-22 15:12:07.033
9	Anna	Karenina	12/20/1994	karenina@gmail.com	1065 Devon Ln	Harrisonburg	VA	United States	22801	540-209-7565	Tofig Gasimov	2022-02-22 15:12:07.033
10	Carl	Charleston	10/18/1998	carl98@gmail.com	1054 Lois Ln	Harrisonburg	VA	United States	22801	540-209-2777	Tofig Gasimov	2022-02-22 15:12:07.033
11	Kenne	Garla	10/18/1995	garla98@gmail.com	1032 Lois Ln	Harrisonburg	VA	United States	22801	540-210-2777	Tofig Gasimov	2022-02-22 15:12:07.037
12	Kanye	West	10/18/1992	gracias98@gmail.com	1032 Davon Ln	Harrisonburg	VA	United States	22801	540-205-2777	Tofig Gasimov	2022-02-22 15:12:07.037

5) Group by and Having

Description: Lists the number of customers in each city, sorted high to low and includes cities with more than 0 customers.

```
SELECT COUNT(CustomerID) AS #CustomerInCity, CustomerCity
FROM CUSTOMER_T
GROUP BY CustomerCity
HAVING COUNT(CustomerID) > 0
ORDER BY COUNT(CustomerID) DESC;
```

	#CustomerInCity	CustomerCity
1	8	Harrisonburg
2	2	Roanoke
3	1	Norfolk
4	1	Richmond

6) Inner join with three tables

Description: Joins three tables-Product, Order and Order detail according to the matching value of Product ID between Product and Order detail tables and the matching value of OrderNumber between Order detail and Order tables with the selected fields like Price, Quantity from Order detail table.

```
SELECT  PRODUCT_T.ProductName, ORDER_T.OrderNumber, ORDER_DETAIL_T.Price,
        ORDER_DETAIL_T.Quantity
FROM    PRODUCT_T INNER JOIN
        ORDER_DETAIL_T ON
        ORDER_T
        PRODUCT_T.ProductID = ORDER_DETAIL_T.ProductID INNER JOIN
        ORDER_T
        ON ORDER_DETAIL_T.OrderNumber = ORDER_T.OrderNumber
```

	ProductName	OrderNumber	Price	Quantity
1	Aburel Hand Sanitizer	09ab76cd	\$ 7.59	1
2	High Hand Wipes	07adb67n	\$ 5.59	2
3	Aburel Hand Sanitizer	08hayg89	\$ 7.59	2
4	Nurofen Liquid Powder	67hs65af	\$ 4.79	1
5	Strepsils candy	78cjd89	\$ 10.59	2
6	Nightquil	54acd76h	\$ 12.49	1
7	High Hand Wipes	43asrthc	\$ 5.59	2
8	Nurofen Liquid Powder	45aseg56	\$ 4.79	1
9	High Hand Wipes	03frth56	\$ 5.59	2
10	Nightquil	08thy67n	\$ 12.49	1

7) Count

Description: Counts Product category names per product category with grouping by Category name.

```
SELECT CategoryName, COUNT(*) AS "CountPerCategory"  
FROM PRODUCT_CATEGORY_T  
GROUP BY CategoryName;
```

	CategoryName	CountPerCategory
1	Antiseptic Hand Washes	2
2	Pharmaceutical medicine	3

Procedures

1) Stored procedure

```
CREATE PROCEDURE procedure_Tables
```

```
AS
```

```
SELECT * FROM CUSTOMER_T
```

```
SELECT * FROM PRODUCT_T
```

```
SELECT * FROM PRODUCT_CATEGORY_T
```

```
SELECT * FROM WAREHOUSE_T
```

```
SELECT * FROM SUPPLIER_T
```

```
SELECT * FROM SHIPMENT_T
```

```
SELECT * FROM STORE_T
```

```
SELECT * FROM DEPARTMENT_T
```

```
SELECT * FROM EMPLOYEE_T
```

```
SELECT * FROM EMPLOYEE_SKILL_T
```

```
SELECT * FROM ORDER_T
```

```
SELECT * FROM ORDER_DETAIL_T
```

```
GO;
```

Execution:

```
EXEC procedure_Tables;
```

2) Trigger procedure

```
CREATE TRIGGER procedure_Customer ON CUSTOMER_T
AFTER UPDATE
AS
BEGIN

UPDATE CUSTOMER_T
SET LastUpdatedBy='Tofig Gasimov',LastUpdated=GETDATE()
WHERE CustomerID>0

END
```

Drop Table statements

1. DROP TABLE ORDER_DETAIL_T;
2. DROP TABLE ORDER_T;
3. DROP TABLE EMPLOYEE_SKILL_T;
4. DROP TABLE EMPLOYEE_T;
5. DROP TABLE DEPARTMENT_T;
6. DROP TABLE STORE_T;
7. DROP TABLE SHIPMENT_T;
8. DROP TABLE SUPPLIER_T;
9. DROP TABLE WAREHOUSE_T;
10. DROP TABLE PRODUCT_CATEGORY_T;

11. DROP TABLE PRODUCT_T;

12. DROP TABLE CUSTOMER_T;