1. Project description: explain what your database project is about.

Our database system is produced for The Wholesale Clothing Company and its goal is to maintain the relationships between The Wholesale Clothing Company and its departments, employees, inventories, clothes, shops working with and logistic companies which are responsible for transportation of clothes between shops and our company.

2. Scope: what is included/excluded? Which processes are supported, which ones are not?

Included Business Processes

- Creating shipments from Producer to us and Us from Shops
- Storing clothes in inventory (by ShipmentID FK column in CLOTHING and INVENTORY table)
- Categorization of Clothes (type column in CLOTHING)
- Sale records are kept in SHIPMENT table
- Logistics company information are stored
- Storing employee and department info

Excluded Business Processes

- All clothing returning functionality (a.k.a change requests) are excluded
- Exporting to EXCEL will be done in web interface part

3. Data and requirements analysis for the database and business processes

Functional Requirements

- Creating, reading, updating and deletion of all entities.
- Filtering of clothes by their attributes.
- Exporting data to excel.
- Return and change features.
- Storage of sale records.

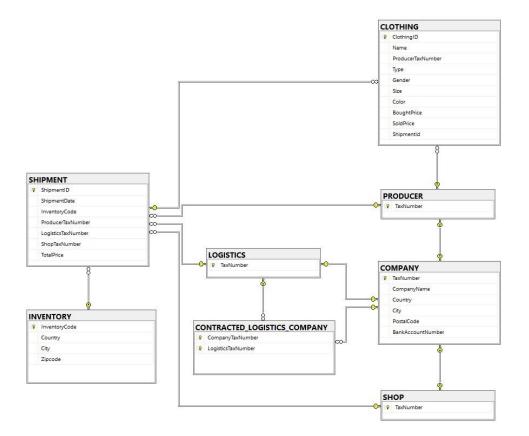
Non-Functional Requirements

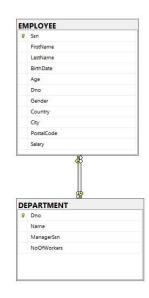
- Mobile compliant web interface
- Flask framework along with Python will be for web interface.
- Pyodbc driver will be used.
- Microsoft SQL server will be used as database engine

Business Processes

- Producer produces the Clothes and ships them to our company by a Logistics company.
- Quality control Department checks whether the shipped clothes are deformed or not. If so, they are returned to Producer. Cost of deformed clothes are sent back to our bank account.
- Shipped clothes are kept in an Inventory and they are categorized by Employees that are working in operation Department.
- Marketing department arranges the shops demands and sales department sells them.
- In each sale, a sale record is kept.
- Clothes are sent to Shops by a Logistics company.
- If a return request is issued from a Shop, the Clothes are sent back to Inventory by Logistic company. Each return request is stored in database. The cost of returned clothes are sent back to shops bank account.
- If a change request is issued from a Shop, the Clothes are sent back to Inventory by Logistic company. Each change request is stored in database.

4. Diagram of whole database.





c) TABLES

1) CLOTHING TABLE

- **ii)** Table which contains information of clothes which are produced by producers.
- i, iii) Name Of the fields/columns and their data types
- ClothingID (int)
- Name (vnarchar(50))
- ProducerTaxNumber (int)
- Type (nvarchar(25)
- Gender (char(1))
- Size (nvarchar(5))
- Color (nvarchar(25))
- BoughtPrice (int)
- SoldPrice (int)
- ShipmentId (int)

iv)

Indexes = None

Primary Key = ClothingID

Foreign Keys are = CLOTHING_PRODUCER

CLOTHING SHIPMENT

CLOTHING is connected with PRODUCER by ProducerTaxNumber, CLOTHING is connected with SHIPMENT by ShipmentId

v)

Unique; None

Identitiy; ClothingID is identity

Check constraints; Gender is should be 'F' for Female and 'M' for

Male, others invalid

Defaults; None

Computed columns; None

vi) No Triggers.

2) COMPANY TABLE

- **ii)** Table which contains information about companies that are producers, logistics and shops.
- i,iii) Name Of the fields/columns and their data types
- TaxNumber (int)
- CompanyName (nvarchar(50))
- Country (nvarchar(25))
- City (nvarchar(25))
- PostalCode (nchar(5))
- BankAccountNumber(nvarchar(50))

iv)

Indexes = None Primary Key = TaxNumber

Foreign Key = None

v)

Unique = BankAccountNumber Identitiy = None Check constraints = None Defaults = None Computed columns = None

vi) No Triggers.

3) CONTRACTED LOGISTICS COMPANY TABLE

- ii) This table keeps which logistics work with which company i, iii) Name Of the fields/columns and their data types
- CompanyTaxNumber (int)
- LogisticsTaxNumber (int)

iv)

Indexes = None
Primary Keys are = CompanyTaxNumber

LogisticsTaxNumber

Foreign Keys are = CONTRACTED_LOGISTICS_COMPANY_COMPANY CONTRACTED_LOGISTICS_COMPANY_LOGISTICS

CONTRACTED_LOGISTICS_COMPANY is connected with company with COMPANY by CompanyTaxNumber

CONTRACTED_LOGISTICS_COMPANY is connected with LOGISTICS by LogisticsTaxNumber

v)

Unique = None Identitiy = None Check constraints = None Defaults = None Computed columns = None

vi) No Triggers.

4) DEPARTMENT TABLE

ii) Table which contains information about departments.

```
i,iii) Name Of the fields/columns and their data types
```

- Dno (int)
- Name (nvarchar(50))
- ManagerSsn (int)
- NoOfWorkers (int)

iv)

Indexes = None
Primary Key = Dno
Foreign Key = DEPARTMEN_EMPLOYEE
DEPARTMENT is connected with EMPLOYEE by ManagerSsn.

v)

Unique = None Identitiy = None Check constraints = None Defaults = None Computed columns = None

vi) No Triggers.

5) EMPLOYEE TABLE

- ii) Table which contains information about Employees.i,iii)) Name Of the fields/columns and their data types
- Ssn (int)
- FirstName (nvarchar(50))
- LastName (nvarchar(50))
- BirthDate (smalldatetime)
- Age (int)
- Dno (int)
- Gender (char(1)
- Country (nvarchar(25))
- City (nvarchar(25))
- PostalCode (nchar(5))
- Salary (int)

iv)

Indexes = BirthDate Primary Key = Ssn

Foreign Key = EMPLOYEE_DEPARTMENT

EMPLOYEE is connected with DEPARTMENT by Dno.

v)

Unique = None

Identitiy = None

Check constraints = Gender is should be 'F' for Female and 'M' for

Male, others invalid

Defaults = Country is Turkey Computed columns = Age

vi)

- tg_DecrementNoOfWorkers = this trigger automatically decrease NoOfWorkers in department table when employee is deleted.
- tg_IncrementNoOfWorkers = this trigger automatically increase NoOfWorkers in department table when employee is added to the employee table.

6) INVENTORY TABLE

- ii) Table which contains information about where are our inventories.
- i,iii) Name Of the fields/columns and their data types
- InventoryCode (int)
- Country (nvarchar(25))
- City (nvarchar(25))
- ZipCode (nvarchar(25))

iv)

Indexes = None

Primary Key = InventoryCode

Foreign Key = None

v)

Unique = None

Identitiy = None

Check constraints = None

Defaults = None

Computed columns = None

vi) No Trigger.

7) LOGISTICS TABLE

- ii) Table which contains information about companies Tax Numbers.
- i,iii)) Name Of the fields/columns and their data types
- TaxNumber (int)

iv)

Indexes = None

Primary Key = TaxNumber

Foreign Key = LOGISTICS_COMPANY

LOGISTICS is connected with COMPANY by TaxNumber

v)

Unique = None Identitiy = None Check constraints = None Defaults = None Computed columns = None

vi) No Trigger.

8) PRODUCER TABLE

- ii) Table which contains information of producers.
- i, iii) Name Of the fields/columns and their data types
- TaxNumber (int)

iv)

Indexes = None
Primary Key = TaxNumber
Foreign Keys are = PRODUCER COMPANY

PRODUCER is connected with COMPANY by TaxNumber

v)

Unique; None Identitiy; None Check constraints; None Defaults; None Computed columns; None vi) No triggers.

9) SHIPMENT TABLE

ii) Table which contains information of shipment which made by producer to our inventory or our inventory to shop.

i,iii) Name Of the fields/columns and their data types

- ShipmentID (int)
- ShipmentDate (smalldatetime)
- InventoryCode (int)
- ProducerTaxNumber (int)
- LogisticsTaxNumber (int)
- ShopTaxNumber (int)
- TotalPrice (int)

iv)

Indexes = None

Primary Key = ShipmentID

Foreign Keys are = SHIPMENT_INVENTORY, SHIPMENT_PRODUCER,

SHIPMENT_LOGISTICS, SHIPMENT_SHOP

SHIPMENT is connected with INVENTORY by InventoryCode,

SHIPMENT is connected with PRODUCER by ProducerTayNur

SHIPMENT is connected with PRODUCER by ProducerTaxNumber, SHIPMENT is connected with LOGISTICS by LogisticsTaxNumber, SHIPMENT is connected with SHOP by ShopTaxNumber

```
v)
```

Unique = None Identitiy = ShipmentID Check constraints = None Defaults = None Computed columns = None

vi) No Triggers.

10) SHOP TABLE

- ii) Table which contains information of shops.
- i, iii) Name Of the fields/columns and their data types
- TaxNumber (int)

iv)

Indexes = None

Primary Keys are = TaxNumber

Foreign Keys are = SHOP_COMPANY

SHOP_COMPANY is connected with COMPANY by TaxNumber

v)

Unique = None

Identitiy = None

Check constraints = None

Defaults = None

Computed columns = None

vi) No triggers.

d) Views

1) <u>ClothingInventory</u>: Table which contains id, name of clothes and their inventory codes.

```
As
Select c.ClothingID, c.Name, i.InventoryCode
From CLOTHING c inner join SHIPMENT s on c.ShipmentId=s.ShipmentID
inner join INVENTORY i on s.InventoryCode=i.InventoryCode
```

| | | Name | InventoryCode |
|----|----|-----------------------|---------------|
| 1 | 1 | Oduncu Gomlegi | 1 |
| 2 | 2 | Boxer | 1 |
| 3 | 3 | Palazzo | 1 |
| 4 | 4 | Kaz Tüyü Kaban | 2 |
| 5 | 5 | Deri Ceket | 2 |
| 6 | 6 | Genç Çorap | 3 |
| 7 | 7 | Örme Eşofman Altı | 3 |
| 8 | 8 | Şişme Mont | 1 |
| 9 | 9 | Kareli Gömlek | 1 |
| 10 | 10 | Dik Yaka Şişme Mont | 2 |
| 11 | 11 | Mini Etek | 2 |
| 12 | 12 | Polo Yaka T-shirt | 2 |
| 13 | 13 | Zümrüt Yeşili Elbise | 3 |
| 14 | 14 | Pijama Altı | 3 |
| 15 | 15 | Yüksek Bel Pantolon | 3 |
| 16 | 16 | Oversize Ceket | 1 |
| 17 | 17 | Kapüşonlu Hırka | 1 |
| 18 | 18 | Örme Bluz | 1 |
| 19 | 19 | Basic T-shirt | 1 |
| 20 | 20 | Bisiklet Yaka T-shirt | 1 |
| 21 | 21 | Kumaş Pantolon | 3 |
| 22 | 22 | Sade Gömlek | 3 |
| 23 | 23 | Spor Çorap | 3 |
| 24 | 24 | V Yaka T-shirt | 3 |
| 25 | 25 | Pijama Üstü | 3 |
| 26 | 26 | Siyah Mont Cocuk | 2 |
| 27 | 27 | Beyaz Mont Cocuk | 2 |

2) ClothingTypes: Table which contains clothing types and amount of them.

```
Greate VIEW [dbo].[ClothingTypes]
AS
SELECT c.Type,count(*) as Amount
FROM CLOTHING c
Group By c.Type
```

| | Туре | Amount |
|----|----------|--------|
| 1 | BLUZ | 1 |
| 2 | CEKET | 2 |
| 3 | ELBİSE | 1 |
| 4 | EŞOFMAN | 1 |
| 5 | ETEK | 1 |
| 6 | GÖMLEK | 3 |
| 7 | HIRKA | 1 |
| 8 | İÇ GİYİM | 3 |
| 9 | KABAN | 1 |
| 10 | MONT | 4 |
| 11 | PANTOLON | 3 |
| 12 | PİJAMA | 2 |
| 13 | T-SHİRT | 4 |

3) DepartmentsOfEmployees: Table which contains ssn, full name of employees and their departments' department number and department name.

```
Create VIEW [dbo].[DepartmentsOfEmployees]
AS
SELECT e.Ssn,e.FirstName + ' ' + e.LastName as FullName,e.Dno,d.Name
FROM EMPLOYEE e inner join DEPARTMENT d on e.Dno=d.Dno
```

| | Ssn | FullName | Dno | Name |
|----|-----|------------------|-----|-----------|
| 1 | 101 | CEM ANARAL | 1 | IT |
| 2 | 102 | HASAN ŞENYURT | 1 | IT |
| 3 | 103 | ALİ YETIM | 1 | IT |
| 4 | 104 | NİMET ŞAHİN | 1 | IT |
| 5 | 105 | ABDULLAH PEKMEZ | 1 | IT |
| 6 | 201 | MELİSA DURMUŞ | 2 | MARKETING |
| 7 | 202 | AYŞE KESKİN | 2 | MARKETING |
| 8 | 203 | ZEYNEP TÜRKOĞLU | 2 | MARKETING |
| 9 | 204 | BİLGE DELEN | 2 | MARKETING |
| 10 | 205 | KEMALETTİN KURUR | 2 | MARKETING |
| 11 | 301 | EZGİ MOLA | 3 | SALES |
| 12 | 302 | ASLAN ASLANKAYA | 3 | SALES |
| 13 | 303 | MURAT BELEK | 3 | SALES |
| 14 | 304 | BAHAR YILAR | 3 | SALES |
| 15 | 305 | SEHEL CAN | 3 | SALES |
| 16 | 401 | RECEP TORLU | 4 | OPERATION |
| 17 | 402 | MUHAMMED OLCAN | 4 | OPERATION |
| 18 | 403 | MUSTAFA ŞENTÜRK | 4 | OPERATION |
| 19 | 404 | EGE OĞLAK | 4 | OPERATION |
| 20 | 405 | SİMGE ÖZER | 4 | OPERATION |
| 21 | 501 | MEHMET DEMİR | 5 | QUALITY |
| 22 | 502 | FATİH ŞİMŞEK | 5 | QUALITY |
| 23 | 503 | MELEK TAŞKIN | 5 | QUALITY |
| 24 | 504 | ALİHAN KONUK | 5 | QUALITY |
| 25 | 505 | İLAYDA GÖREN | 5 | QUALITY |

4) IncomingShipments: Table which contains incoming shipment information (producer to our inventory). Shipment Id, Shipment date, inventory code, producer's tax number, logistics' tax number and total price of shipment are shown in the table.

```
CREATE VIEW [dbo].[IncomingShipments]
AS
SELECT s.ShipmentID,s.ShipmentDate,s.InventoryCode,s.ProducerTaxNumber,s.LogisticsTaxNumber,s.TotalPrice
FROM SHIPMENT s
Where s.ShopTaxNumber is NULL
```

| | ShipmentID | ShipmentDate | InventoryCode | ProducerTaxNumber | LogisticsTaxNumber | TotalPrice |
|---|------------|---------------------|---------------|-------------------|--------------------|------------|
| 1 | 9000 | 2021-03-03 00:00:00 | 1 | 1000 | 1010 | 585 |
| 2 | 9002 | 2021-06-20 00:00:00 | 3 | 1005 | 1010 | 570 |
| 3 | 9004 | 2021-09-11 00:00:00 | 3 | 1000 | 1010 | 570 |
| 4 | 9005 | 2021-12-23 14:48:00 | 2 | 1000 | 1015 | 300 |

5) Managers: Table which contains ssn, full name, department number and department name of managers of each department.

```
|Create VIEW [dbo].[Managers]
AS

SELECT e.Ssn,e.FirstName + ' ' + e.LastName as FullName, e.Dno,d.Name
FROM EMPLOYEE e inner join DEPARTMENT d on e.Ssn=d.ManagerSsn
```

| | Ssn | FullName | Dno | Name |
|---|-----|---------------|-----|-----------------|
| 1 | 103 | ALİ YETIM | 1 | IT |
| 2 | 201 | MELİSA DURMUŞ | 2 | MARKETING |
| 3 | 301 | EZGİ MOLA | 3 | SALES |
| 4 | 401 | RECEP TORLU | 4 | OPERATION |
| 5 | 501 | MEHMET DEMİR | 5 | QUALITY CONTROL |

6) NameOfContractedLogistics: Table which contains names of producers, shops and logistic companies which work with them.

```
Create VIEW [dbo].[NameOfContractedLogistics]
AS
SELECT c.CompanyName, log.CompanyName as LogisticsName
FROM COMPANY c inner join CONTRACTED_LOGISTICS_COMPANY clc on c.TaxNumber=clc.CompanyTaxNumber
inner join
(select c2.TaxNumber, c2.CompanyName from COMPANY c2 inner join LOGISTICS l2 on c2.TaxNumber=l2.TaxNumber) log
    on log.TaxNumber=clc.LogisticsTaxNumber
```

| | CompanyName | LogisticsName |
|---|---------------------|---------------|
| 1 | Kardeşler Tekstil | Aras Kargo |
| 2 | Kaplan Tuhafiye | MNG Kargo |
| 3 | Zara Bağdat Caddesi | MNG Kargo |
| 4 | H&M Maltepe | MNG Kargo |

7) OutgoingShipments: Table which contains outgoing shipment information (our inventory to shops). Shipment Id, Shipment date, inventory code, shop's tax number, logistics' tax number and total price of shipment are shown in the table.

Create VIEW [dbo] [OutgoingShipments]

Where s.ProducerTaxNumber is NULL

| | ShipmentID | ShipmentDate | InventoryCode | ShopTaxNumber | LogisticsTaxNumber | TotalPrice |
|---|------------|---------------------|---------------|---------------|--------------------|------------|
| 1 | 9001 | 2021-03-04 00:00:00 | 2 | 1020 | 1015 | 1280 |
| 2 | 9003 | 2021-12-09 00:00:00 | 1 | 1030 | 1015 | 670 |
| 3 | 9006 | 2021-12-23 14:50:00 | 1 | 1020 | 1010 | NULL |

8) ProfitOfClothes: Table which contains information of clothes and their profits (sold price – bought price).

Create VIEW [dbo].[ProfitOfClothes]

SELECT c.ClothingID,c.Name,c.Type,c.Color,c.Size,c.SoldPrice - c.BoughtPrice as Profit FROM CLOTHING c

| | ClothingID | Name | Туре | Color | Size | Profit |
|----|------------|-----------------------|----------|------------|------|--------|
| 1 | 1 | Oduncu Gomlegi | GÖMLEK | TURUNCU | S | 30 |
| 2 | 2 | Boxer | İÇ GİYİM | MAVİ | XXL | 15 |
| 3 | 3 | Palazzo | PANTOLON | SİYAH | S | 40 |
| 4 | 4 | Kaz Tüyü Kaban | KABAN | KAHVERENGİ | XL | 50 |
| 5 | 5 | Deri Ceket | CEKET | SİYAH | M | 70 |
| 6 | 6 | Genç Çorap | İÇ GİYİM | GRİ | L | 7 |
| 7 | 7 | Örme Eşofman Altı | EŞOFMAN | SİYAH | S | 30 |
| 8 | 8 | Şişme Mont | MONT | YEŞİL | XL | 40 |
| 9 | 9 | Kareli Gömlek | GÖMLEK | BEYAZ | L | 25 |
| 10 | 10 | Dik Yaka Şişme Mont | MONT | SİYAH | M | 40 |
| 11 | 11 | Mini Etek | ETEK | KIRMIZI | XS | 40 |
| 12 | 12 | Polo Yaka T-shirt | T-SHIRT | SARI | L | 40 |
| 13 | 13 | Zümrüt Yeşili Elbise | ELBİSE | YEŞİL | M | 50 |
| 14 | 14 | Pijama Altı | PİJAMA | SARI | M | 30 |
| 15 | 15 | Yüksek Bel Pantolon | PANTOLON | BEYAZ | L | 30 |
| 16 | 16 | Oversize Ceket | CEKET | SİYAH | L | 50 |
| 17 | 17 | Kapüşonlu Hırka | HIRKA | GRİ | S | 40 |
| 18 | 18 | Örme Bluz | BLUZ | KIRMIZI | M | 30 |
| 19 | 19 | Basic T-shirt | T-SHIRT | SİYAH | L | 30 |
| 20 | 20 | Bisiklet Yaka T-shirt | T-SHIRT | MAVİ | XL | 40 |
| 21 | 21 | Kumaş Pantolon | PANTOLON | SİYAH | L | 35 |
| 22 | 22 | Sade Gömlek | GÖMLEK | BEYAZ | XS | 30 |
| 23 | 23 | Spor Çorap | İÇ GİYİM | MAVİ | S | 10 |
| 24 | 24 | V Yaka T-shirt | T-SHIRT | MOR | XXL | 40 |
| 25 | 25 | Pijama Üstü | PİJAMA | YEŞİL | XXS | 20 |
| 26 | 26 | Siyah Mont Cocuk | MONT | SİYAH | S | 50 |
| 27 | 27 | Beyaz Mont Cocuk | MONT | BEYAZ | S | 50 |

9) TopFiveEarnerEmployee: Table which contains ssn, full name and salary of employees whose salary is in top five in all company.

```
CREATE VIEW [dbo].[TopFiveEarnerEmployee]
AS
SELECT Top 5 e.Ssn,e.FirstName + ' ' + e.LastName as FullName,e.Salary
FROM EMPLOYEE e
Order By e.Salary desc
```

| | Ssn | FullName | Salary |
|---|-----|--------------|--------|
| 1 | 401 | RECEP TORLU | 7000 |
| 2 | 501 | MEHMET DEMİR | 7000 |
| 3 | 405 | SİMGE ÖZER | 6000 |
| 4 | 502 | FATİH ŞİMŞEK | 6000 |
| 5 | 503 | MELEK TAŞKIN | 6000 |

e) Triggers

1) tg_IncrementNoOfWorkers: Increases number of employees by one in the department that added employee works when new employee is added.

```
ALTER TRIGGER [dbo].[tg_IncrementNoOfWorkers]
    on [dbo].[EMPLOYEE]

AFTER INSERT

As

Begin
    Update DEPARTMENT
    Set NoOfWorkers=NoOfWorkers + 1
    Where Dno=(Select Dno From Inserted)
End
```

Before the trigger:

| | Dno | Name | ManagerSsn | NoOfWorkers |
|---|-----|-----------------|------------|-------------|
| 1 | 1 | IT | 103 | 5 |
| 2 | 2 | MARKETING | 201 | 5 |
| 3 | 3 | SALES | 301 | 5 |
| 4 | 4 | OPERATION | 401 | 5 |
| 5 | 5 | QUALITY CONTROL | 501 | 5 |

Inserting new employee to dno=4:

Insert Into EMPLOYEE(Ssn,Dno) Values (406,4)

After the trigger:

| | Dno | Name | ManagerSsn | NoOfWorkers |
|---|-----|-----------------|------------|-------------|
| 1 | 1 | IT | 103 | 5 |
| 2 | 2 | MARKETING | 201 | 5 |
| 3 | 3 | SALES | 301 | 5 |
| 4 | 4 | OPERATION | 401 | 6 |
| 5 | 5 | QUALITY CONTROL | 501 | 5 |

2) tg_DecrementNoOfWorkers: Decreases number of employees by one in the department that deleted employee works when employee is deleted.

```
ALTER TRIGGER [dbo].[tg_DecrementNoOfWorkers]
on [dbo].[EMPLOYEE]

AFTER DELETE
As
Begin

Update DEPARTMENT
Set NoOfWorkers=NoOfWorkers - 1
Where Dno=(Select Dno From Deleted)
End
```

Before the trigger:

| | Dno | Name | ManagerSsn | NoOfWorkers |
|---|-----|-----------------|------------|-------------|
| 1 | 1 | IT | 103 | 5 |
| 2 | 2 | MARKETING | 201 | 5 |
| 3 | 3 | SALES | 301 | 5 |
| 4 | 4 | OPERATION | 401 | 6 |
| 5 | 5 | QUALITY CONTROL | 501 | 5 |

Deleting employee whose ssn=406, dno=4:

Delete From EMPLOYEE Where Ssn=406 and Dno=4

After the trigger:

| | Dno | Name | ManagerSsn | NoOfWorkers |
|---|-----|-----------------|------------|-------------|
| 1 | 1 | IT | 103 | 5 |
| 2 | 2 | MARKETING | 201 | 5 |
| 3 | 3 | SALES | 301 | 5 |
| 4 | 4 | OPERATION | 401 | 5 |
| 5 | 5 | QUALITY CONTROL | 501 | 5 |

Stored Procedures

1 - sp_AverageAgeOfDepartment

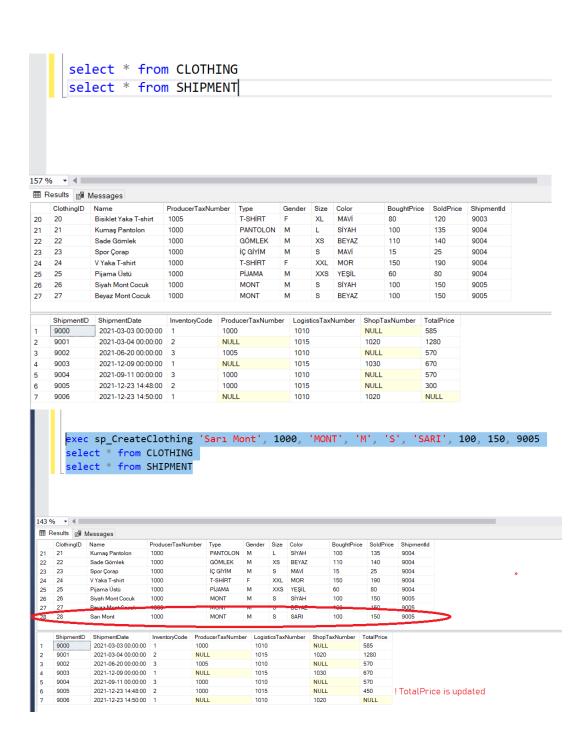
Shows the average age of employees working in given department Dno

```
CREATE Procedure sp_AverageAgeOfDepartment
 @dno int
As
Begin
      Select d.Dno,avg(e.Age * 1.0) as AverageAge
      From EMPLOYEE e inner join DEPARTMENT d on e.Dno=d.Dno
      Group By d.Dno
      Having @dno = d.Dno
End
 SQLQuery1.sql - L...VD1T1M5\Acer (69))* + X
        exec sp AverageAgeOfDepartment 3
 157 % ▼ ◀ ■
 AverageAge
     Dno
     3
          32.400000
```

2 - sp_CreateClothing

Inserts clothing to CLOTHING table, calls sp_UpdateTotalPrice to update the total price of shipments after creation

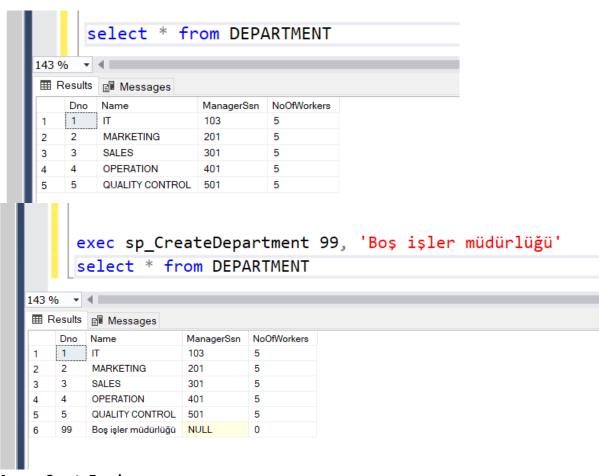
```
Create Procedure sp_CreateClothing
  @Name nvarchar(50),
  @PTax int,
  @Type nvarchar(25),
  @Gender char(1),
  @Size nvarchar(5),
  @Color nvarchar(25),
  @BPrice int,
  @SPrice int,
  @ShipmentId int
As
Begin
       Insert Into CLOTHING (Name, ProducerTaxNumber, Type, Gender, Size, Color,
BoughtPrice, SoldPrice, ShipmentId)
       Values (@Name, @PTax, @Type, @Gender, @Size, @Color, @BPrice, @SPrice,
@ShipmentId)
       exec sp_UpdateTotalPrice
End
```



3 - sp CreateDepartment

Creates a new department entry to DEPARTMENT. Initially, ManagerSsn is null and NoOfWorkers is 0.

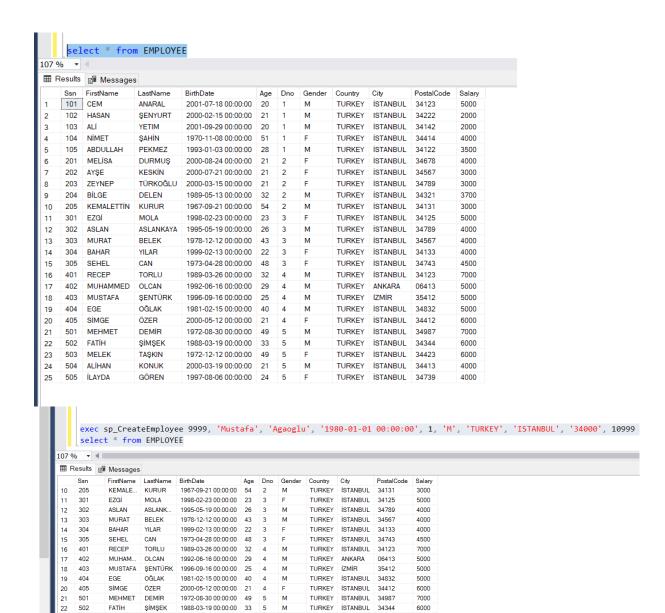
```
CREATE Procedure sp_CreateDepartment(
     @Dno int,
     @Name nvarchar(50)
)
As
Begin
     Insert Into DEPARTMENT
     Values (@Dno, @Name, NULL, 0)
End
```



4 - sp_CreateEmployee

Creates a new employee record to EMPLOYEE table

```
CREATE Procedure sp_CreateEmployee
       @Ssn int,
       @FirstName nvarchar(50),
       @LastName nvarchar(50),
       @BirthDate smalldatetime,
       @Dno int,
       @Gender char(1),
       @Country nvarchar(25),
       @City nvarchar(25),
       @PostalCode nchar(5),
       @Salary int
As
Begin
       Insert Into EMPLOYEE Values
              (@Ssn,
              @FirstName,
              @LastName,
              @BirthDate,
              @Dno,
              @Gender,
              @Country,
              @City,
              @PostalCode,
              @Salary)
```



5 - sp CreateIncomingShipment

TASKIN

KONUK

Agaoglu

1972-12-12 00:00:00

2000-03-19 00:00:00

1980-01-01 00:00:00 41

49 5

MELEK

ALÍHAN

Mustafa

Query executed successfully.

23 503

Adds incoming shipment to SHIPMENT table. Since it came from a producer, ShopTaxNumber column for the new entry will be null.

М

TURKEY

TURKEY

TURKEY

ISTANBUL

ISTANBUL

ISTANBUL

34423

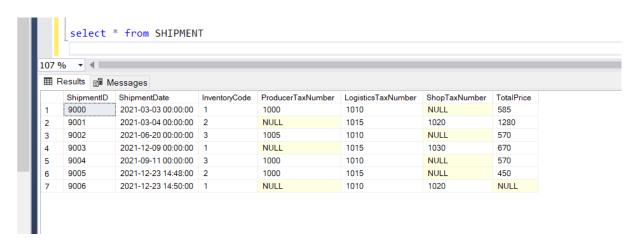
34413

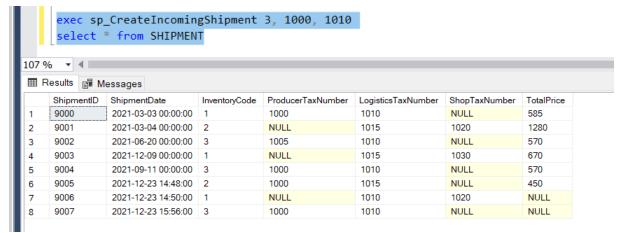
6000

4000

10999

LAPTOP-JVD1T1M5 (15.0 RTM) LAPTOP-JVD1T1M5\Acer (70) WHOLESALE CLOTHIN





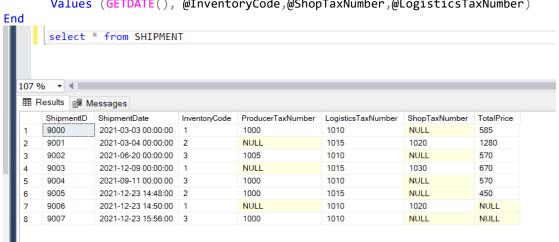
6 - sp CreateOutgoingShipment

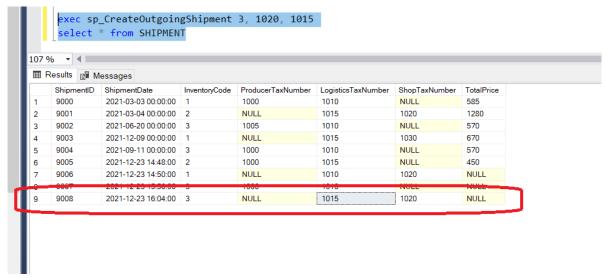
Adds new shipment entry to SHIPMENT table. ProducerTaxNumber will be NULL since we are shipping it to shops.

CREATE Procedure sp_CreateOutgoingShipment @InventoryCode int, @ShopTaxNumber int, @LogisticsTaxNumber int As Begin

Insert Into SHIPMENT (ShipmentDate, InventoryCode, ShopTaxNumber, LogisticsTaxNumber)

Values (GETDATE(), @InventoryCode,@ShopTaxNumber,@LogisticsTaxNumber)

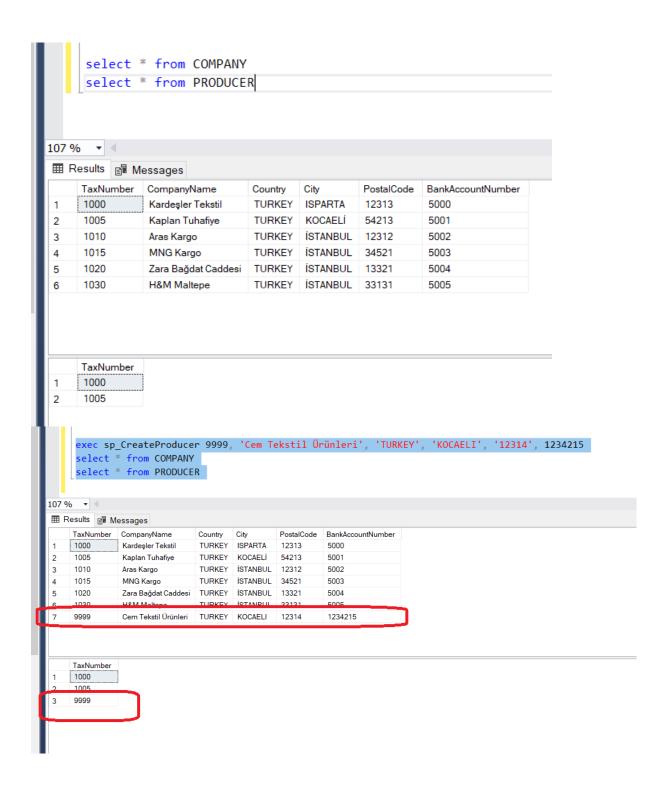




7 - sp_CreateProducer

Creates a new entry to COMPANY table, adds TaxNumber FK to PRODUCER table since there is an inheritance between them.

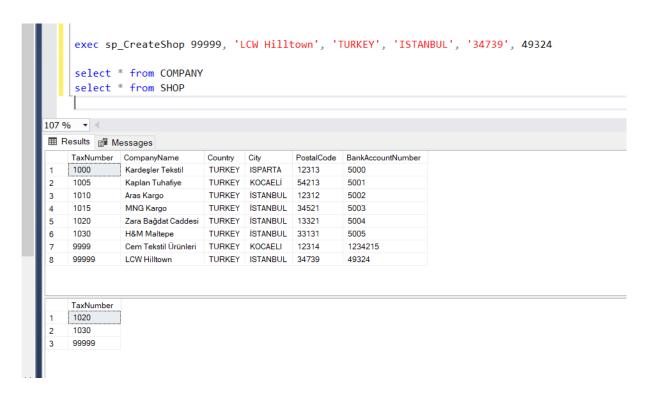
```
CREATE Procedure sp_CreateProducer
       @TaxNumber int,
       @CompanyName nvarchar(50),
       @Country nvarchar(25),
       @City nvarchar(25),
       @PostalCode nchar(5),
       @BankAccountNumber nvarchar(50)
As
Begin
       Insert Into COMPANY Values (
              @TaxNumber,
              @CompanyName,
              @Country,
              @City,
              @PostalCode,
              @BankAccountNumber
       Insert Into PRODUCER Values (@TaxNumber)
End
```



8 - sp_CreateShop

Adds shop information to COMPANY table, adds its tax number to SHOP table as FK due to inheritance.

```
CREATE Procedure sp_CreateShop
       @TaxNumber int,
       @CompanyName nvarchar(50),
       @Country nvarchar(25),
       @City nvarchar(25),
       @PostalCode nchar(5),
       @BankAccountNumber nvarchar(50)
As
Begin
       Insert Into COMPANY Values (
              @TaxNumber,
              @CompanyName,
              @Country,
              @City,
              @PostalCode,
              @BankAccountNumber
       )
       Insert Into SHOP Values (@TaxNumber)
End
         select * from COMPANY
         select * from SHOP
   107 % ▼ ◀
    CompanyName
                                                    PostalCode
                                                              BankAccountNumber
         TaxNumber
                                   Country
                                           City
         1000
                                   TURKEY ISPARTA
                                                    12313
                                                              5000
                   Kardeşler Tekstil
                                   TURKEY KOCAELİ
                                                    54213
                                                              5001
         1005
                   Kaplan Tuhafiye
                                                              5002
         1010
                   Aras Kargo
                                   TURKEY İSTANBUL 12312
         1015
                   MNG Kargo
                                   TURKEY İSTANBUL 34521
                                                              5003
         1020
                   Zara Bağdat Caddesi TURKEY İSTANBUL 13321
                                                              5004
         1030
                                   TURKEY ISTANBUL 33131
                                                              5005
                   H&M Maltepe
         9999
                   Cem Tekstil Ürünleri TURKEY KOCAELI
                                                    12314
                                                              1234215
         TaxNumber
         1020
         1030
```



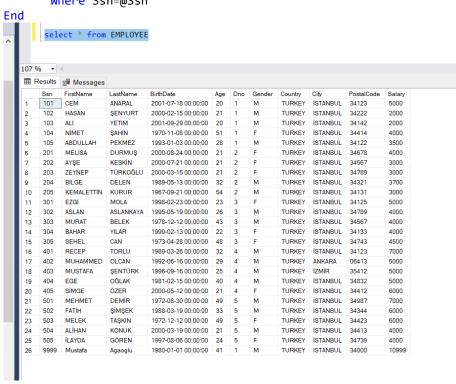
9 – sp_DeleteEmployee

Deletes an employee record from table EMPLOYEE

Create Procedure sp_DeleteEmployee
 @Ssn int

As Begin

Delete From EMPLOYEE Where Ssn=@Ssn





10 - sp_DeleteProducer

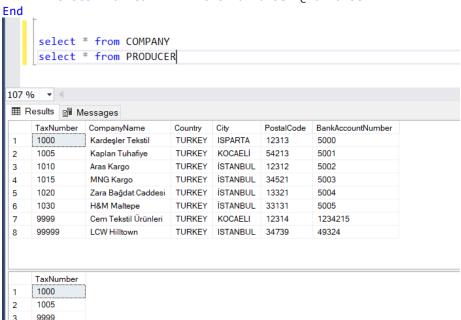
Deletes a producer from both PRODUCER and COMPANY tables

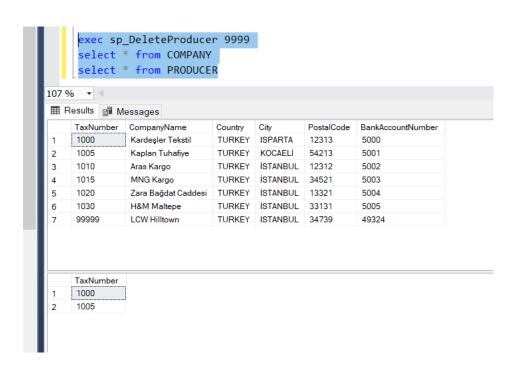
Create Procedure sp_DeleteProducer @TaxNumber int

As

Begin

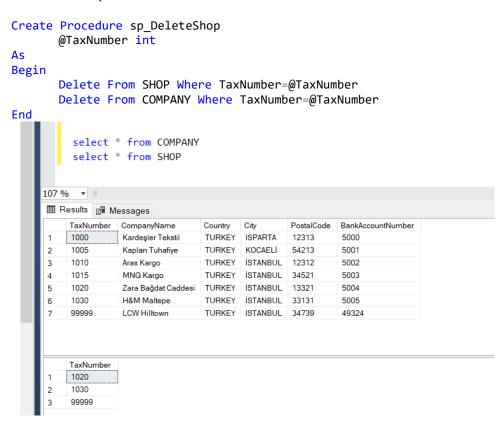
Delete From PRODUCER Where TaxNumber=@TaxNumber
Delete From COMPANY Where TaxNumber=@TaxNumber

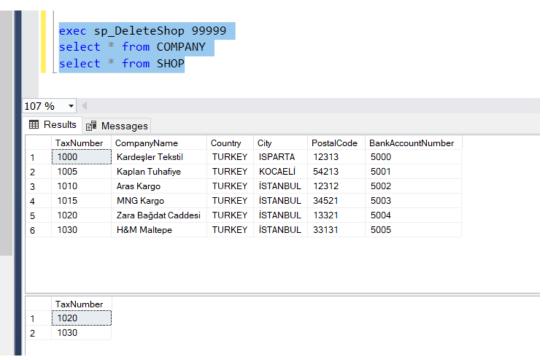




11 - sp_DeleteShop

Deletes a shop from both SHOP and COMPANY tables.

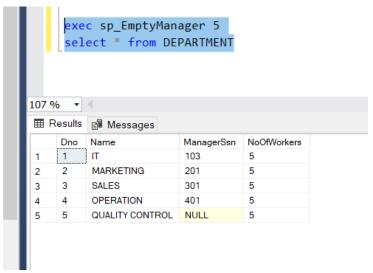




12 – sp_EmptyManager

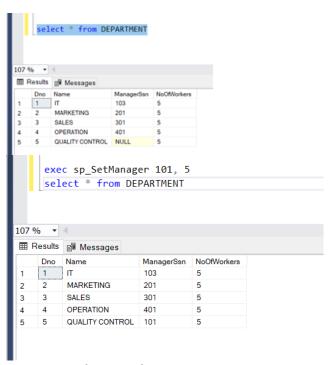
Sets given departments manager to null

```
Create Procedure sp_EmptyManager(
      @Dno int
)
As
Begin
      Update DEPARTMENT
      Set ManagerSsn=NULL
      Where Dno=@Dno
End
         select * from DEPARTMENT
   107 % ▼ 4
    Name
                            ManagerSsn NoOfWorkers
        Dno
             IT
                            103
                                      5
         1
                                      5
    2
        2
             MARKETING
                            201
        3
                            301
                                      5
    3
             SALES
                                      5
        4
                            401
             OPERATION
        5
             QUALITY CONTROL 501
                                      5
```



13 - sp_SetManager

Assigns manager to DEPARTMENT table.



14 - sp_UpdateTotalPrice

Updates total price of every entry in SHIPMENT. Total price is calculated using the clothes that shipment contains.

```
Create Procedure sp_UpdateTotalPrice
Begin
         Update s
         Set s.TotalPrice= new.TotalPrice
         From SHIPMENT s inner join (Select s.ShipmentID, sum(c.SoldPrice) as TotalPrice
                    From CLOTHING c inner join SHIPMENT s on c.ShipmentId=s.ShipmentID
                    Group By s.ShipmentID) new on s.ShipmentID=new.ShipmentID
End
          select * from SHIPMENT
   107 %
    ShipmentDate
                                                                                                     TotalPrice
         ShipmentID
                                      InventoryCode ProducerTaxNumber
                                                                    LogisticsTaxNumber
                                                                                      ShopTaxNumber
        9000
                    2021-03-03 00:00:00 1
                                                   1000
                                                                     1010
                                                                                      NULL
                                                                                                     585
         9001
                    2021-03-04 00:00:00 2
                                                   NULL
                                                                     1015
                                                                                      1020
                                                                                                     1280
    2
    3
         9002
                    2021-06-20 00:00:00 3
                                                   1005
                                                                     1010
                                                                                      NULL
                                                                                                     570
         9003
                    2021-12-09 00:00:00 1
                                                   NULL
                                                                     1015
                                                                                      1030
                                                                                                     670
                    2021-09-11 00:00:00 3
                                                                                                     570
    5
         9004
                                                   1000
                                                                     1010
                                                                                      NULL
    6
         9005
                    2021-12-23 14:48:00 2
                                                   1000
                                                                                                     450
                                                                     1015
                                                                                      NULL
    7
         9006
                    2021-12-23 14:50:00 1
                                                   NULL
                                                                     1010
                                                                                      1020
                                                                                                     NULL
    8
         9007
                    2021-12-23 15:56:00 3
                                                   1000
                                                                     1010
                                                                                      NULL
                                                                                                     NULL
         9008
                    2021-12-23 16:04:00 3
                                                   NULL
                                                                     1015
                                                                                      1020
                                                                                                     NULL
              sp_UpdateTotalPrice
               select * from SHIPMENT
        107 % ▼ 4
ustei
         Results Messages
              ShipmentID
                                        InventoryCode ProducerTaxNumber
                                                                    LogisticsTaxNumber
                                                                                    {\sf ShopTaxNumber}
                                                                                                  TotalPrice
                        2021-03-03 00:00:00 1
             9000
                                                                     1010
                                                                                                   585
                                                    1000
                                                                                     NULL
              9001
                        2021-03-04 00:00:00 2
                                                    NULL
                                                                     1015
                                                                                     1020
                                                                                                   1280
                                                                     1010
                                                                                                   570
              9002
                        2021-06-20 00:00:00 3
                                                    1005
                                                                                     NULL
         3
              9003
                        2021-12-09 00:00:00
                                                    NULL
                                                                     1015
                                                                                     1030
                                                                                                   670
              9004
                        2021-09-11 00:00:00 3
                                                    1000
                                                                     1010
                                                                                     NULL
                                                                                                   570
              9005
                        2021-12-23 14:48:00 2
                                                    1000
                                                                     1015
                                                                                     NULL
                                                                                                   450
              9006
                        2021-12-23 14:50:00 1
                                                    NULL
                                                                     1010
                                                                                     1020
                                                                                                   NULL
                        2021-12-23 15:56:00
                                                                     1010
                                                                                     NULL
                                                                                                   NULI
                        2021-12-23 16:04:00 3
                                                    NULL
              9008
                                                                     1015
                                                                                     1020
                                                                                                   150
```