Marmara University – Faculty of Engineering – Department of Computer Engineering
Fall 2020 – CSE3055 Database Systems
Project

STEP #3 - Logical database design and mapping & Physical design and database implementation + (Req. ana. & Concep. db. des.)

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a) Project description

It is a program that provides appropriate infrastructure data (patient, medicine) for every pharmacy, facilitates the work of pharmacists, provides fast and accurate information access, and keeps data.

b) Scope

Our scope on this Project:

-Finding a drug place in the pharmacy and getting information about drugs.

-Viewing the stock status of drugs.

-Keeping patient data.

- Providing fast communication by keeping warehouse information.

-We provide rapid and easy access to pharmacy data by listing the information of the companies producing the drugs, the pharmacy warehouses where the drugs are located, the shelf place information where the drugs are kept, and the drugs by type.
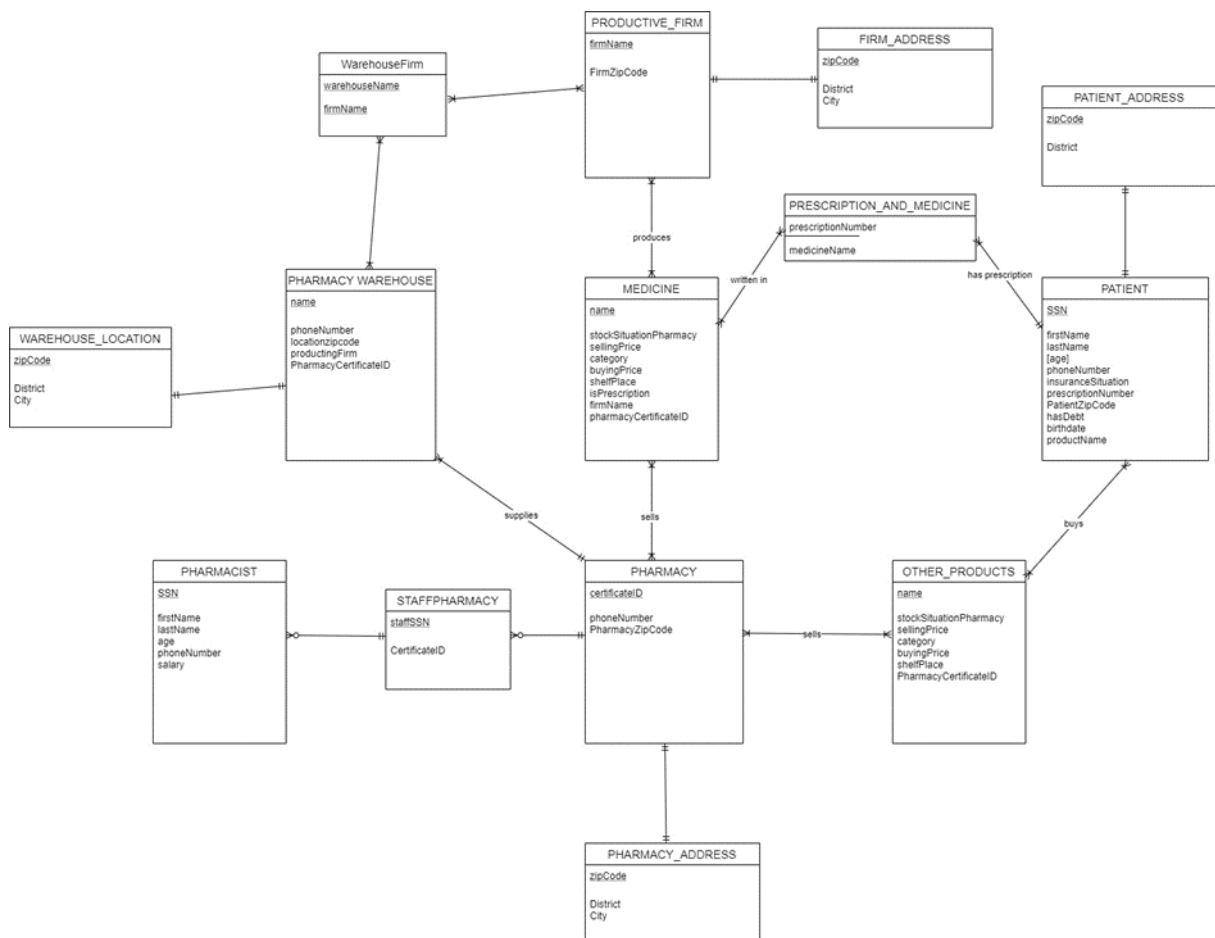
b2) Data and requirements analysis for the database and business processes.

We have to check stocks of pharmacy if we want to check situation of medicine. If stocks are empty, we want it from the warehouse. If there is no medicine in warehouse either, warehouse can send a request to the productive firm.
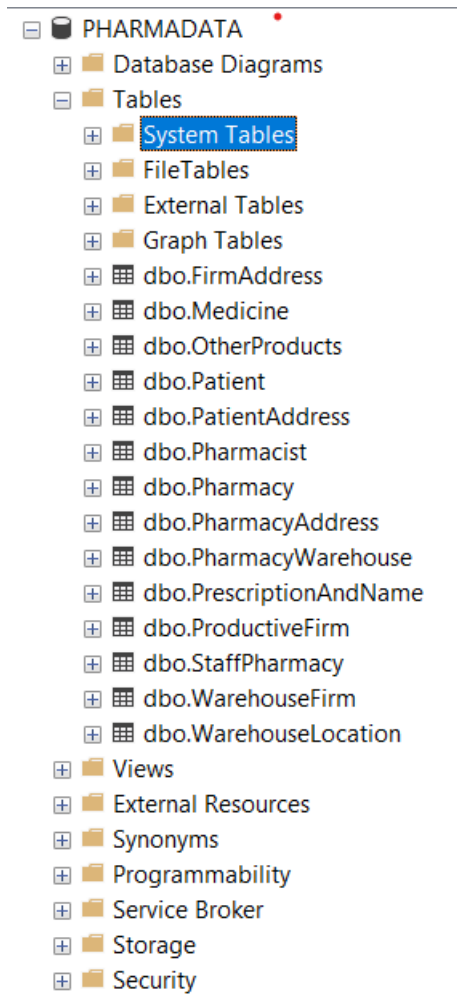If duration of use does not expire, then patient can not take a new same medicine. And if patient has debt to pharmacy, he/she can not buy any medicine before paying his/her debt.

- Medicines have to order from pharmacy warehouse if medicine out of stocks.
- If patient has insurance, then he/she buys the medicine cheaper then normal price.
- Products other than medicine places in product part and they are categorized.(clean, care etc.)
- The medicines with the prescription can not be given without doctor report.
- The products other than medicine are supplied from different firms.
- When a prescription drug is taken, the day of sale and usage times are kept in the database and the day the patient can take the same drug for the second time is determined.
- If prescripted medicine does not indicated in prescription, patient can not take more than one of this medicine.

b3) Diagram

c) Tables

PHARMADATA
- Database Diagrams
- Tables
  - System Tables
  - FileTables
  - External Tables
  - Graph Tables
  - dbo.FirmAddress
  - dbo.Medicine
  - dbo.OtherProducts
  - dbo.Patient
  - dbo.PatientAddress
  - dbo.Pharmacist
  - dbo.Pharmacy
  - dbo.PharmacyAddress
  - dbo.PharmacyWarehouse
  - dbo.PrescriptionAndName
  - dbo.ProductiveFirm
  - dbo.StaffPharmacy
  - dbo.WarehouseFirm
  - dbo.WarehouseLocation
- Views
- External Resources
- Synonyms
- Programmability
- Service Broker
- Storage
- Security

Medicine: Includes information about medicine.

Primary Key: Name

Foreign Key: FirmName and PharmacyCertificateID

Index: Name

Column Name	Data Type	Allow Nulls
Name	nvarchar(50)	☐
StockSituationPharmacy	int	☑
SellingPrice	float	☑
Category	varchar(50)	☑
BuyingPrice	float	☑
ShelfPlace	varchar(10)	☑
IsPrescription	varchar(5)	☑
FirmName	nvarchar(50)	☑
PharmacyCertificateID	smallint	☐
		☐

LAPTOP-HVDRSJ83....TA - dbo.Medicine   LAPTOP-HVDRSJ83....arehouseLocation

Patient: Includes information about patient.

Primary Key: PrescriptionNumber

Foreign Key: ProductName and PatientZipCode

LAPTOP-HVDRSJ83.P...ATA - dbo.Patient

Column Name	Data Type	Allow Nulls
Ssn	int	☑
FirstName	nvarchar(50)	☑
LastName	nvarchar(50)	☑
PhoneNumber	varchar(50)	☑
InsuranceStuation	varchar(50)	☑
PrescriptionNumber	nvarchar(25)	☐
HasDebt	int	☑
ProductName	nvarchar(50)	☑
PatientZipCode	int	☑
Birthdate	smalldatetime	☑
		☐

Pharmacist: Includes information about pharmacist.

Primary Key: Ssn

Foreign Key: ProductName and PatientZipCode

Column Name	Data Type	Allow Nulls
Ssn	int	☐
FirstName	nvarchar(50)	☑
LastName	nvarchar(50)	☑
Age	tinyint	☑
PhoneNumber	varchar(50)	☑
Salary	int	☑
		☐

Pharmacy: Includes information about pharmacy.

Primary Key: CertificateID

Foreign Key: PharmacyZipCode

Column Name	Data Type	Allow Nulls
CertificateID	smallint	☐
PhoneNumber	varchar(15)	☑
PharmacyZipCode	int	☑
		☐

PharmacyAddress: Includes information about pharmacy address. Because pharmacy address is composite.

Primary Key: ZipCode

Column Name	Data Type	Allow Nulls
City	nvarchar(25)	☑
District	nvarchar(25)	☑
ZipCode	int	☐
		☐

PharmacyWarehouse: Includes information about pharmacy warehouse.

Primary Key: Name

Foreign Key: PharmacyCertificateID and LocationZipCode

Column Name	Data Type	Allow Nulls
Name	nvarchar(50)	☐
PhoneNumber	varchar(15)	☑
LocationZipCode	int	☑
PharmacyCertificateID	smallint	☑
		☐

PrescriptionAndName: Includes information about prescription number and medicine name. This provides connection between patient and medicine.

Primary Key: MedicineName and PrescriptionNumber

Column Name	Data Type	Allow Nulls
MedicineName	nvarchar(50)	☐
PrescriptionNumber	nvarchar(25)	☐
		☐

ProductiveFirm: Includes information about productive firm.

Primary Key: FirmName

Foreign Key: FirmZipCode

Column Name	Data Type	Allow Nulls
FirmName	nvarchar(50)	☐
FirmZipCode	int	☑
		☐

PatientAddress: Includes information about patient address. Because patient address is composite.

Primary Key: ZipCode

LAPTOP-HVDRSJ83.P...bo.PatientAddress		
Column Name	Data Type	Allow Nulls
District	nvarchar(25)	☑
ZipCode	int	☐
		☐

StaffPharmacy: Includes information about staff ssn and pharmacy certificate id. This provides connection between pharmacist and pharmacy.

Primary Key: StaffSsn

Foreign Key: CertificateID

LAPTOP-HVDRSJ83....dbo.StaffPharmacy		
Column Name	Data Type	Allow Nulls
StaffSsn	int	☐
CertificateID	smallint	☑
		☐

WarehouseLocation: Includes information about pharmacy warehouse location. Because warehouse location is composite.

Primary Key: ZipCode

LAPTOP-HVDRSJ83....arehouseLocation		
Column Name	Data Type	Allow Nulls
City	nvarchar(25)	☑
District	nvarchar(25)	☑
ZipCode	int	☐
		☐

WarehouseFirm: Includes information about pharmacy warehouse and productive firm name. This provides connection between pharmacy warehouse and productive firm.

Primary Key: WarehouseName and FirmName

Column Name	Data Type	Allow Nulls
WarehouseName	nvarchar(50)	☐
FirmName	nvarchar(50)	☐

OtherProducts: Includes information about products other than drugs.

Primary Key: Name

Foreign Key: PharmacyCertificateID

Column Name	Data Type	Allow Nulls
Name	nvarchar(50)	☐
StockSituaitonPharmacy	int	☑
SellingPrice	float	☑
Category	varchar(50)	☑
BuyingPrice	float	☑
ShelfPlace	varchar(50)	☑
PharmacyCertificateID	smallint	☐

FirmAddress: Includes information about firm address. Because firm address is composite.

Primary Key: ZipCode

Column Name	Data Type	Allow Nulls
City	nvarchar(25)	☑
District	nvarchar(25)	☑
ZipCode	int	☐

v) **Unique:** Patient-Ssn

We use unique for patient ssn because each ssn is personal.

Identity: PharmacyWarehouse-WarehouseNumber

We used it to increase 1 by 1 when each pharmacy warehouse was added to our database.

Computed column: Patient Age

We have patients' birthdate data in the database. We calculated the age of the patients using the birthday data.

Default: Patient-hasDebt

If the patient has no debt information to the pharmacy, we wanted it to be set as default 0 TL.

Default: Patient-Age

If we assign the age information of the patient as 0, we calculated the age using birthday data to keep the age information up to date in the database.

Check constraint : Patient-HasDebt

Patients with debts of more than 400 TL will not be able to buy new drugs.

d) Views

1) **InsuranceAndPriceTables:** People who do not have health insurance and pay drugs more than 200 TL.

```
-- People who do not have health insurance and pay drugs more than 200 TL.
Create VIEW InsuranceAndPriceTables as
Select distinct p.FirstName + ' ' + p.LastName Name, pm.MedicineName, m.SellingPrice
From Patient p, Medicine m, PrescriptionAndName pm
Where p.PrescriptionNumber=pm.PrescriptionNumber and m.Name=pm.MedicineName and p.InsuranceStuation='No'
Group by p.FirstName, p.LastName, pm.MedicineName, m.SellingPrice
Having m.SellingPrice > 200
```

Output:

	Name	MedicineN...	SellingPrice
►	Buket Şahin	Benefix® 5...	3510,4
	Cengiz Lağ...	Cialis 20 mg	257,2
	Emre Can	Cialis 20 mg	257,2
	Fevzi Altunt...	Benefix® 5...	3510,4
*	NULL	NULL	NULL

2) **StaffInformation:** If pharmacist first name includes "ra"

```sql
-- If pharmacist first name includes "ra"
Create VIEW StaffInformation as
Select ps.FirstName + ' ' + ps.LastName Name, ps.Age Age
From Pharmacy p inner join StaffPharmacy sp on p.CertificateID sp.CertificateID
inner join Pharmacist ps on sp.StaffSsn ps.Ssn
Where ps.FirstName like '%ra%'
```

Output:

Name	Age
Dilara Özavcı	23
Murat Kaan ...	23
NULL	NULL

LAPTOP-HVDRSJ83.P....StaffInformation

3) **MedicineFirmAddress** : Firms with the most different drugs in the Psycholeptic category.

```sql
-- Firms with the most different drugs in the Psycholeptic category.
Create VIEW MedicineFirmAddress as
Select TOP(3) Count(m.Name) as NoOfPsycholeptics, m.FirmName as FirmName, pf.FirmZipCode as FirmZipCode
From Medicine m inner join ProductiveFirm pf on pf.FirmName=m.FirmName
Where m.Category='Psycholeptic'
Group by m.FirmName, pf.FirmZipCode
Order by Count(m.Name) desc
```

Output:

NoOfPsych...	FirmName	FirmZipCo...
2	Lilly İlaç	34660
2	Santa Farma	34382
1	Johnson&Jo...	34810
NULL	NULL	NULL

LAPTOP-HVDRSJ83....dicineFirmAddress

4) **StockSituation:** Pharmacywarehouses containing medicines with less than 10 stocks.

```
-- Pharmacywarehouses containing medicines with less than 10 stocks.
Create VIEW StockSituation as
Select DISTINCT m.StockSituationPharmacy as StockSituation, m.SellingPrice as MedicinePrice,
m.Name as MedicineName, pw.Name as PharmacyWarehouseName
From Medicine m inner join PharmacyWarehouse pw on pw.PharmacyCertificateID= m.PharmacyCertificateID
inner join WarehouseFirm wf on pw.Name=wf.WarehouseName inner join ProductiveFirm pf on pf.FirmName=wf.FirmName
Where m.SellingPrice<1000 and m.SellingPrice>35
Group By  m.StockSituationPharmacy,m.SellingPrice, m.Name, pw.Name
Having m.StockSituationPharmacy<10
```

Output:

LAPTOP-HVDRSJ83.P...bo.StockSituation   ⊣ ✕   step3.sql - LAPTO...DRSJ83\ERDEM (60))*

StockSituat...	MedicinePr...	MedicineName	PharmacyWarehouseName
9	78,55	Benipin 8 mg	LANA PHARMA
9	78,55	Benipin 8 mg	MERSİN GÜNEŞ ECZA DEPOSU
9	78,55	Benipin 8 mg	SELÇUK ECZA DEPOSU MERSİN ŞUBESİ
3	257,2	Cialis 20 mg	LANA PHARMA
3	257,2	Cialis 20 mg	MERSİN GÜNEŞ ECZA DEPOSU
3	257,2	Cialis 20 mg	SELÇUK ECZA DEPOSU MERSİN ŞUBESİ
4	164,1	Dapigre 30 mg	LANA PHARMA
4	164,1	Dapigre 30 mg	MERSİN GÜNEŞ ECZA DEPOSU
4	164,1	Dapigre 30 mg	SELÇUK ECZA DEPOSU MERSİN ŞUBESİ
8	62,63	Ignis 5 mg	LANA PHARMA
8	62,63	Ignis 5 mg	MERSİN GÜNEŞ ECZA DEPOSU
8	62,63	Ignis 5 mg	SELÇUK ECZA DEPOSU MERSİN ŞUBESİ
6	57,75	Terbisil 250 mg	LANA PHARMA
6	57,75	Terbisil 250 mg	MERSİN GÜNEŞ ECZA DEPOSU
6	57,75	Terbisil 250 mg	SELÇUK ECZA DEPOSU MERSİN ŞUBESİ
8	213,38	Ursolvan 300 mg	LANA PHARMA
8	213,38	Ursolvan 300 mg	MERSİN GÜNEŞ ECZA DEPOSU
8	213,38	Ursolvan 300 mg	SELÇUK ECZA DEPOSU MERSİN ŞUBESİ
0	949,05	Xeplion 75 mg	LANA PHARMA
0	949,05	Xeplion 75 mg	MERSİN GÜNEŞ ECZA DEPOSU
0	949,05	Xeplion 75 mg	SELÇUK ECZA DEPOSU MERSİN ŞUBESİ
5	696,48	Zyvoxid 600 mg	LANA PHARMA
5	696,48	Zyvoxid 600 mg	MERSİN GÜNEŞ ECZA DEPOSU
5	696,48	Zyvoxid 600 mg	SELÇUK ECZA DEPOSU MERSİN ŞUBESİ

5) **DebtNameAndShelfPlace** : Medicines taken by patients which has debt and the shelf place of the drugs

```sql
--Medicines taken by patients which has debt and the shelf place of the drugs
Create VIEW DebtNameAndShelfPlace as
Select m.Name as MedicineName, m.ShelfPlace as ShelfPlace,
p.FirstName + ' ' + p.LastName as PatientName, p.HasDebt as Debt
From Patient p inner join PrescriptionAndName pan on p.PrescriptionNumber=pan.PrescriptionNumber
inner join Medicine m on m.Name=pan.MedicineName
Where p.HasDebt>0
Group by m.Name, m.ShelfPlace, p.FirstName, p.LastName, p.HasDebt
```

Output:

MedicineName	ShelfPlace	PatientName	Debt
Forte 300 mg	D1	Furkan İnce	30
Beloc Zoc 50 mg	D3	Metehan İstanbullu	58
Benexol B12	A3	Azim Çağrı İşçimen	307
Benexol B12	A3	Cem Köklüer	91
Benipin 8 mg	D2	Metehan İstanbullu	58
Cialis 20 mg	F2	Metin Ercan	35
Coraspin 100 mg	A1	Metehan İstanbullu	58
Dapigre 30 mg	F2	Hasan Erdem	75
Dideral 40 mg	D3	Metehan İstanbullu	58
Hiotin 5 mg	B3	Simge Zorlu	269
Kardoritm 10 mg	D3	Hatice Sert	54
Minoset 500 mg	A2	Onur Kalın	120
Nexivol 5 mg	D2	Deniz Bitlisli	64
Nurofen 200 mg	D1	Elif Saçar	105
Parol 500 mg	A2	Azim Çağrı İşçimen	307
Xanax 1 mg	C4	Merve Deniz Şenel	120

e) Trigger

TrgUpdateAge : After insertion and updating of Birthdate it fills Age part by calculating difference between current year and birth year.

```
-- Trigger

CREATE Trigger TrgUpdateAge
    on Patient
    after insert, update
as
begin

    Update p
    Set p.Age = DATEDIFF(hour, p.Birthdate, GETDATE())/8766 + i.Age
    From Patient p inner join inserted i
        on p.Age=i.Age
end
```

Before :

6	Mehmet Ali	Yılmaz	05364785655	No	MAY55	NULL	33730	1965-11-03 ...	55	0
63	Mehmet Can	Kılınçarslan	NULL	Yes	MCK22	Mask 50 pcs	33940	1998-12-31 ...	22	0
3	Merve Deniz	Şenel	NULL	No	MDS35	NULL	33140	1985-08-28 ...	35	120
22	Metin	Ercan	NULL	Yes	ME67	Tylol HOT 5...	33940	1953-03-14 ...	67	35
45	Metehan	İstanbullu	05551062480	Yes	MI70	NULL	33220	1950-03-20 ...	70	58
59	Mert Onat	Işıkay	NULL	Yes	MOI22	NULL	33460	1998-07-19 ...	22	0
75	Merve	Söğüt	05063400102	Yes	MS35	NULL	33220	1985-03-16 ...	35	0
12	Muhammed...	Efe	NULL	Yes	MYE43	NULL	33140	1977-04-23 ...	43	0
47	Oğuzhan	Batıyel	NULL	Yes	OB35	Kolonya 80 ...	33340	1985-05-15 ...	35	0
30	Onur	Kalın	NULL	No	OK31	NULL	33340	1989-01-30 ...	31	120
42	Ömer	Öztürk	NULL	Yes	OO21	Ipana 3d W...	33940	1999-09-09 ...	21	0
19	Okan	Şimşek	NULL	No	OS23	NULL	33940	1997-10-16 ...	23	0
70	Rojda Bahar	Yaprak	NULL	Yes	RBY21	Mask 50 pcs	33730	1999-04-20 ...	21	0
44	Selena	Demir	NULL	Yes	SD19	NULL	33460	2001-07-18 ...	19	0
71	Simay	Gülenay	05336921020	No	SG44	NULL	33220	1976-11-13 ...	44	0
26	Sevcan	Özcan	NULL	Yes	SO59	Bepanthol P...	33010	1961-12-17 ...	59	0
34	Suat	Sefa	NULL	Yes	SS76	NULL	33140	1944-04-05 ...	76	0
18	Sedef Selcan	Özcan	NULL	Yes	SSO66	NULL	33220	1954-05-10 ...	66	0
15	Simge	Zorlu	NULL	Yes	SZ63	Mask 50 pcs	33730	1957-06-12 ...	63	269
14	Tuğba	Kara	03243267452	Yes	TK80	NULL	33730	1940-01-20 ...	80	0
17	Ülkü Sena	Doğan	NULL	Yes	USD58	NULL	33460	1962-10-17 ...	58	0
38	Vahit Utku	İşçimen	NULL	Yes	VUI25	Tylol HOT 5...	33140	1995-05-07 ...	25	0
50	Veli	Yılmaz	NULL	Yes	VY62	NULL	33220	1958-01-29 ...	62	0
43	Yağmur	Bakşi	05501648240	Yes	YB18	NULL	33220	2002-08-17 ...	18	0
61	Yakup	Biçer	NULL	Yes	YB73	NULL	33220	1947-06-16 ...	73	0
27	Yeşim	Yeşilyurt	NULL	Yes	YY45	Kolonya 80 ...	33340	1975-07-12 ...	45	0
58	Zuhat	Ceyran	NULL	Yes	ZC52	NULL	33140	1968-02-24 ...	52	0
76	🛈 Mahmut	🛈 Karaman	🛈 NULL	🛈 Yes	🛈 MK43	🛈 NULL	🛈 33460	🛈 1977-10-09🛈 NULL	0	
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

After:

Ssn	FirstName	LastName	PhoneNum...	InsuranceSt...	Prescriptio...	ProductNa...	PatientZipC...	Birthdate	Age	HasDebt
6	Mehmet Ali	Yılmaz	05364785655	No	MAY55	NULL	33730	1965-11-03 _	55	0
63	Mehmet Can	Kılınçarslan	NULL	Yes	MCK22	Mask 50 pcs	33940	1998-12-31 _	22	0
3	Merve Deniz	Şenel	NULL	No	MDS35	NULL	33140	1985-08-28 _	35	120
22	Metin	Ercan	NULL	Yes	ME67	Tylol HOT 5..	33940	1953-03-14 _	67	35
45	Metehan	İstanbullu	05551062480	Yes	MI70	NULL	33220	1950-03-20 _	70	58
76	Mahmut	Karaman	NULL	Yes	MK43	NULL	33460	1977-10-09 _	43	0
59	Mert Onat	Işıkay	NULL	Yes	MOI22	NULL	33460	1998-07-19 _	22	0
75	Merve	Söğüt	05063400102	Yes	MS35	NULL	33220	1985-03-16 _	35	0
12	Muhammed...	Efe	NULL	Yes	MYE43	NULL	33140	1977-04-23 _	43	0
47	Oğuzhan	Batıyel	NULL	Yes	OB35	Kolonya 80 ...	33340	1985-05-15 _	35	0
30	Onur	Kalın	NULL	No	OK31	NULL	33340	1989-01-30 _	31	120
42	Omer	Öztürk	NULL	Yes	OO21	Ipana 3d W...	33940	1999-09-09 _	21	0
19	Okan	Şimşek	NULL	No	OS23	NULL	33940	1997-10-16 _	23	0
70	Rojda Bahar	Yaprak	NULL	Yes	RBY21	Mask 50 pcs	33730	1999-04-20 _	21	0
44	Selena	Demir	NULL	Yes	SD19	NULL	33460	2001-07-18 _	19	0
71	Simay	Gülenay	05336921020	No	SG44	NULL	33220	1976-11-13 _	44	0
26	Sevcan	Özcan	NULL	Yes	SO59	Bepanthol P...	33010	1961-12-17 _	59	0
34	Suat	Sefa	NULL	Yes	SS76	NULL	33140	1944-04-05 _	76	0
18	Sedef Selcan	Özcan	NULL	Yes	SSO66	NULL	33220	1954-05-10 _	66	0
15	Simge	Zorlu	NULL	Yes	SZ63	Mask 50 pcs	33730	1957-06-12 _	63	269
14	Tuğba	Kara	03243267452	Yes	TK80	NULL	33730	1940-01-20 _	80	0
17	Ülkü Sena	Doğan	NULL	Yes	USD58	NULL	33460	1962-10-17 _	58	0
38	Vahit Utku	İşçimen	NULL	Yes	VUI25	Tylol HOT 5..	33140	1995-05-07 _	25	0
50	Veli	Yılmaz	NULL	Yes	VY62	NULL	33220	1958-01-29 _	62	0
43	Yağmur	Bakşi	05501648240	Yes	YB18	NULL	33220	2002-08-17 _	18	0
61	Yakup	Biçer	NULL	Yes	YB73	NULL	33220	1947-06-16 _	73	0
27	Yeşim	Yeşilyurt	NULL	Yes	YY45	Kolonya 80 ...	33340	1975-07-12 _	45	0
58	Zuhat	Ceyran	NULL	Yes	ZC52	NULL	33140	1968-02-24 _	52	0
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

f) Stored procedures

sp_FirmMedicine : Drugs which produces by specific firm

```
Create Proc sp_FirmMedicine
    @firmName nvarchar(50)
AS
BEGIN
    Select *
    From Medicine
    Where FirmName = @firmName
end

exec sp_FirmMedicine 'Pfizer'
```

8 %

Results   Messages

	Name	StockSituationPharmacy	SellingPrice	Category	BuyingPrice	ShelfPlace	IsPrescription	FirmName	PharmacyCertificateID
1	Benefix® 500 IU IV	2	3510,4	Blood maker	3218,25	E4	Yes	Pfizer	12
2	Inlyta 7 mg	0	20002,89	Antineoplastic	15684,23	E3	Yes	Pfizer	12
3	Xanax 1 mg	88	19,33	Psycholeptic	15,74	C4	Yes	Pfizer	12
4	Zitrotek 500 mg	6	15,1	Anti Infective	11,33	G2	Yes	Pfizer	12
5	Zyvoxid 600 mg	5	696.48	Antibiotic	642.73	B3	Yes	Pfizer	12

sp_ShelfPlace : Shows places of all drugs in specific category

```sql
Create Proc sp_ShelfPlace
    @Category nvarchar(50)
AS
BEGIN
    Select Name, Category, ShelfPlace
    From Medicine
    Where Category = @Category
end

exec sp_ShelfPlace 'Psycholeptic'
```

98 %

⊞ Results ▦ Messages

	Name	Category	ShelfPlace
1	Abizol 15 mg	Psycholeptic	C4
2	Gyrex 100 mg	Psycholeptic	C4
3	Gyrex 50 mg	Psycholeptic	C4
4	Ignia 5 mg	Psycholeptic	C4
5	Prozac 10 mg	Psycholeptic	C4
6	Prozac 20 mg	Psycholeptic	C4
7	Xanax 1 mg	Psycholeptic	C4
8	Xeplion 75 mg	Psycholeptic	C4

sp_PatientMedicine : Lists patients name and lastname, drug name who he/she buys and price of that drugs

```sql
Create Proc sp_PatientMedicine
    @PrescriptionNumber nvarchar(25)
AS
BEGIN
    Select p.FirstName + ' ' + p.LastName as PatientName, m.Name, m.SellingPrice
    From Patient p inner join PrescriptionAndName pan on p.PrescriptionNumber = pan.PrescriptionNumber
    inner join Medicine m on pan.MedicineName = m.Name
    Where p.PrescriptionNumber = @PrescriptionNumber
end

exec sp_PatientMedicine 'TK80'
```

98 %

⊞ Results ▦ Messages

	PatientName	Name	SellingPrice
1	Tuğba Kara	Benefix® 500 IU IV	3510.4
2	Tuğba Kara	Ormil 80 mg	10.35

sp_PatientInfo : Lists patient firstname and lastname, phone number and zipcode of related patient ssn

```
Create Proc sp_PatientInfo
    @Ssn int
AS
BEGIN
    Select p.FirstName + ' ' + p.LastName as PatientName, p.PhoneNumber, p.PatientZipCode
    From Patient p
    Where Ssn = @Ssn
end

exec sp_PatientInfo '13'
```

98 %

⊞ Results 📃 Messages

	PatientName	PhoneNumber	PatientZipCode
1	Buket Şahin	05051748512	33010

sp_InsuranceStuation : Lists name and lastname according to given insurance situation parameter.

```
Create Proc sp_InsuranceStuation
    @InsuranceStuation varchar(50)
AS
BEGIN
    Select p.FirstName + ' ' + p.LastName as PatientName, p.InsuranceStuation
    From Patient p
    Where InsuranceStuation = @InsuranceStuation
end

exec sp_InsuranceStuation 'No'
```

98 %

⊞ Results 📃 Messages

	PatientName	InsuranceStuation
1	Ali Çağlar	No
2	Burcu Edebali	No
3	Bilge Sakar	No
4	Buket Şahin	No
5	Can Emekçi	No
6	Cem Koklüer	No
7	Cengiz Lağap	No
8	Dilan Merve Torğutalp	No
9	Ece Çatak	No
10	Emre Can	No
11	Fevzi Altuntaş	No
12	Furkan İnce	No
13	Hüseyin Galen İncel	No
14	İdil Ayça Arıkan	No
15	Mehmet Ali Yılmaz	No
16	Merve Deniz Şenel	No
17	Onur Kalın	No
18	Okan Şimşek	No
19	Simay Gülenay	No

sp_StockSituation : Lists information about drug and the company producing the drug, whose stock status is given

```
Create Proc sp_StockSituation
    @StockSituation int
AS
BEGIN
    Select m.Name, m.StockSituationPharmacy, m.SellingPrice, m.FirmName,fa.City,fa.District, fa.ZipCode
    From Medicine m, ProductiveFirm pf, FirmAddress fa
    Where m.StockSituationPharmacy = @StockSituation and pf.FirmName = m.FirmName and pf.FirmZipCode=fa.ZipCode
end

exec sp StockSituation 0
```

18 %

Results | Messages

	Name	StockSituationPharmacy	SellingPrice	FirmName	City	District	ZipCode
1	Dicloflam 50 mg	0	15,57	Santa Farma	İstanbul	H. Edip Adıvar	34382
2	Hepatect 10 ml	0	4687,59	Kansuk Sanayi	İstanbul	Baklalı	34277
3	Iniyta 7 mg	0	20002,89	Pfizer	İstanbul	Ortaköy	34347
4	Posagil 100 mg	0	7637	Abdi Ibrahim	İstanbul	Reşitpaşa	34467
5	Xeplion 75 mg	0	949,05	Johnson&Johnson	İstanbul	Kavacık	34810

sp_OtherProductInfo : Lists name, shelf place and selling price of products that other than drugs whose its category given

```
Create Proc sp_OtherProductInfo
    @Category varchar(50)
AS
BEGIN
    Select op.Name, op.Category, op.ShelfPlace, op.SellingPrice
    From OtherProducts op
    Where Category = @Category
end

exec sp_OtherProductInfo '09'
```

98 %

Results | Messages

	Name	Category	ShelfPlace	SellingPrice
1	Bioderma Sensibio 100 ml	09	L5	70
2	Bioderma Sensibio Foaming	09	L5	100

sp_Profits : Shows profit margin of drugs which sold by pharmacy

```
Create Proc sp_Profits
    @Name nvarchar(50)
AS
BEGIN
    Select m.Name, m.SellingPrice, m.BuyingPrice, m.SellingPrice-m.BuyingPrice as Profit
    From Medicine m
    Where m.Name = @Name
end

exec sp_Profits 'Benefix® 500 IU IV'
```

98 %

Results | Messages

	Name	SellingPrice	BuyingPrice	Profit
1	Benefix® 500 IU IV	3510.4	3218.25	292.15

sp_MedicineWarehouse : Shows the pharmacy warehouse where the drug is available.

```
Create Proc sp_MedicineWarehouse
    @Name nvarchar(50)
AS
BEGIN
    Select m.Name, m.StockSituationPharmacy, pw.Name, pw.PhoneNumber
    From Medicine m, Pharmacy p, PharmacyWarehouse pw
    Where m.Name = @Name and m.PharmacyCertificateID=p.CertificateID and pw.PharmacyCertificateID=p.CertificateID
end

exec sp_MedicineWarehouse 'Ella 30 mg'
```

8 %

Results | Messages

	Name	StockSituationPharmacy	Name	PhoneNumber
1	Ella 30 mg	30	LANA PHARMA	03245022199
2	Ella 30 mg	30	MERSİN GÜNEŞ ECZA DEPOSU	03243278007
3	Ella 30 mg	30	SELÇUK ECZA DEPOSU MERSİN ŞUBESİ	03243363100

sp_TotalPrice : Prints total amount of money that has to pay by patient according to given prescription number.

```
Create Proc sp_TotalPrice
    @PrescriptionNumber nvarchar(25)
AS
BEGIN
    Select distinct p.FirstName, p.PrescriptionNumber, SUM(m.SellingPrice) as Cost
    From Medicine m, Patient p,PrescriptionAndName pan
    Where p.PrescriptionNumber = @PrescriptionNumber and pan.PrescriptionNumber=p.PrescriptionNumber and pan.MedicineName=m.Name
    Group by p.FirstName, p.PrescriptionNumber
end

exec sp_TotalPrice 'DMT35'
```

98 %

Results | Messages

	FirstName	PrescriptionNumber	Cost
1	Dilan Merve	DMT35	16.63