



MARMARA  
ÜNİVERSİTESİ

# HOSPITAL MANAGEMENT SYSTEM DATABASE

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## Description:

The objective of this project is to create a database to centrally handle the information of all the patients and staff in the Ersoy Hastanesi, and to provide access to this information with SQL commands and functions.

## Scope:

- Information about appointment and prescription of patient
- Details about staff's salary, address and more
- Managing operations that the patients undergoes and the staff that attends it
- Create, manage details about patients recovery within each stay.
- Manage operations about the stay information of each patient such as the room, the start and end dates etc...

The database does not include:

- Information about which trainee works on what.
- Other staff members and their responsibilities.
- The department of each doctor and what each doctor specializes on.

## Business Rules:

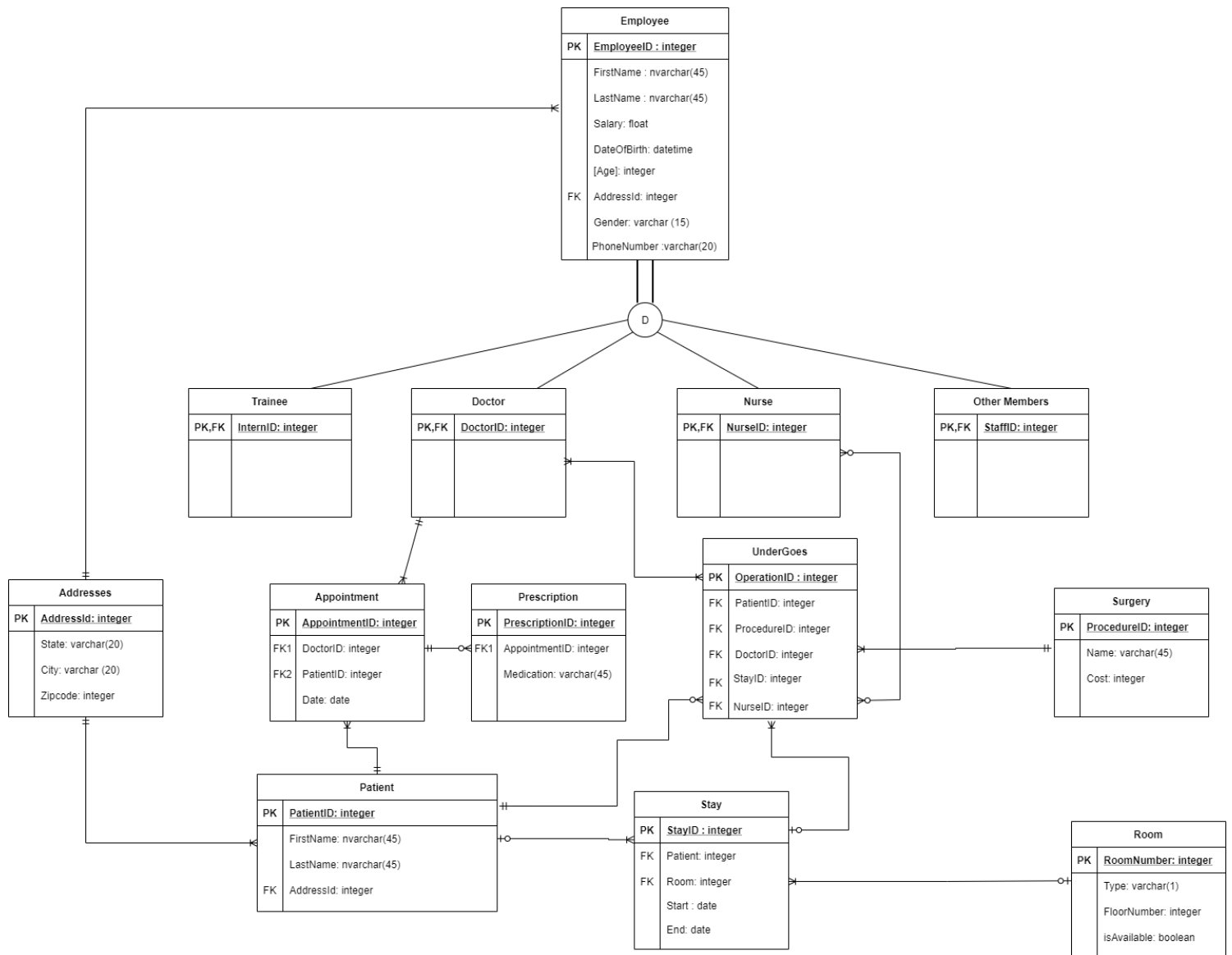
- Each employee inside the hospital is either a doctor, a nurse, a trainee or other staff member.
- Each employee has a unique identifier that separates them from one another.
- For all the patients that came to the hospital; store information about their addresses and other personal information.
- The patient must have at least one appointment to be registered in the system.
- A doctor can have many appointments and may give more than one prescription.
- An appointment is unique to its doctor.
- A patient may stay in the hospital and if they choose to do so they can stay in one room.
- A Patient can have multiple operations and each operation should consist of at least one doctor but there is no such requirement for a nurse.

## Data and requirements analysis:

Dataset holds detailed information about:

- Each employee's and patient's personal information such as their name, gender, age, phone number and address.
- In order to reach each staff or patient everyone's address is recorded and matched with that person.
- Which patient had appointment with which doctor and what prescription did the doctor gave to that person if they did so.
- Keep track of each patient's surgery and what kind of surgery did that person went through, who and how many personnel attended to that surgery and did they stay at the hospital after it.
- If they chose to stay at the hospital, which room did they stay at and for how long.

## Diagram of Whole Database:



## Tables:

**Employee** (EmployeeID: int, FirstName: nvarchar(45), LastName: nvarchar(45), Salary: float, DateOfBirth: datetime, [Age]: int, AddressID: int, Gender: varchar(15), PhoneNumber: varchar(20))

- Indexes are to hold employee salary in ascending form and employee address in ascending form.
- Primary Key EmployeeID: Identification number of the employee.
- Foreign Key AddressID: Address ID of that employee's address.
- Age is a computed column in the Employee table which is computed from the staff's birthdate.
- The trigger compute age calculates that person's age after every insertion.
- PhoneNumber is a unique column inside the employee table. Because every employee has a different phone number from one another.
- Check Constraints: CK\_Employee\_Age: All employees must be at least 18 years old.
- CK\_Employee\_Salary: Salary of all employees must be at least 1000 TL.

**Trainee** (InternID: int)

- Primary Key TraineeID: Identification number of the Trainee.

**Doctor** (DoctorID: int)

- Primary Key DoctorID: Identification number of the Doctor.

**Nurse** (NurseID: int)

- Primary Key NurseID: Identification number of the Nurse.

**Staff** (StaffID: int)

- Primary Key StaffID: Identification number of the Staff.

**Prescription** (PrescriptionID: int, AppointmentID: int, Medication: varchar(45))

- Primary Key PrescriptionID: Number that identifies a prescription given from an appointment.
- Foreign Key AppointmentID: ID number of the appointment from which the prescription is written.
- Medication is a unique column inside the prescription table. Since it holds the medication types.

**Addressess** (AddressID: int, State: varchar(20), City: varchar(20), Zipcode: int)

- Primary Key AddressID: Identification number of the Address.

**Appointment** (AppointmentID: int, DoctorID: int, PatientID: int, Date: date)

- Primary Key AppointmentID: Identification number of the appointment between the patient and the doctor.
- Foreign Key DoctorID: The doctor that attendant to the appointment.
- Foreign Key PatientID: The patient that the appointment belongs to.
- Default value for appointment date inside appointment table is set to the current date.

**Stay** (StayID:int, Patient:int, Room:int, Start:date, End:date)

- Primary Key StayID: Identification number of the Stay.
- Foreign Key PatientID: The patient that the stay in that room.
- Default value for start date inside stay table is set to the current date.
- Default value for end date inside stay table is set to the current date.

**Patient** (PatientID:int, FirstName: nvarchar(45), LastName: nvarchar(45),AddressID: int)

- Primary Key PatientID: Unique id number that the hospital uses to separate each other.
- Foreign Key AddressID: The patients address id number.

**Surgery** (ProcedureID: int, Name: varchar(45),Cost: int)

- Primary Key ProcedureID: Identification number of the Surgery.

**UnderGoes** (OperationID: int, PatientID: int, ProcedureID: int, DoctorID: int, StayID: int, NurseID: int)

- Default value for operation date inside undergoes table is set to the current date.

**Room** (RoomNumber: int, Type: varchar (1), FloorNumber: int, isAvailable: boolean)

- Primary Key RoomNumber: Unique room numbers that the hospital uses to separate each other.

## Views:

**Avg\_Salary**, finds average of each employee types salary.

```
75
76 --Views
77 create view Avg_Salary
78 as
79 select avg(e1.Salary) "Doctor Average Salary" , avg(e2.Salary) "Nurse Average Salary" , avg(e3.Salary) "Trainee Average Salary"
80 from Employee e1, Employee e2, Employee e3, Doctor d, Nurse n, Trainee t
81 where e1.EmployeeID = d.DoctorID AND n.NurseID = e2.EmployeeID AND t.TraineeID = e3.EmployeeID
82
83 select * From Avg_Salary
84
```

Results		Messages	
	Doctor Average Salary	Nurse Average Salary	Trainee Average Salary
1	9492	4200	1008

**Patient\_Surgeries**, lists which patient underwent which operation, some details about the patient and the cost of the operation.

```

94 create view Patient_Surgeries
95 as
96 SELECT distinct p.PatientID,p.FirstName,p.LastName,p.Age,p.AddressID, s.Name,Count(*) NumberOfSurgeries,s.Cost
97 FROM Patient p
98 inner join UnderGoes u on p.PatientID=u.PatientID
99 inner join Surgery s on s.ProcedureID =u.ProcedureID
100 group by p.PatientID,p.FirstName,p.LastName,p.Age,p.AddressID,s.Name,s.Cost
101 having count(*) >= 1
102
103 select * from Patient_Surgeries
104

```

Results		Messages						
	PatientID	FirstName	LastName	Age	AddressID	Name	NumberOfSurgeries	Cost
1	203	Erkan	Petek	67	20003	Carotid endarterectomy	1	1000
2	204	Hallı	Gök	23	20004	Breast biopsy	1	750
3	205	Aesna	Alaca	45	20005	Appendectomy	1	500
4	206	Asmı	Arkut	55	20006	Cataract surgery	1	1250
5	207	Kemal	Daner	56	20007	Cholecystectomy	1	1750
6	208	Zeynel	Üçyurt	49	20008	Debridement of wound, burn, or infection	1	2250
7	210	Merve	Ertuğ	27	20010	Cesarean section	1	1500
8	212	Fatma	Aydın	22	20012	Coronary artery bypass	1	2000
9	213	Hatice	Kara	31	20013	Free skin graft	1	2750
10	214	İpek	Mila	33	20014	Cesarean sections	1	6500
11	215	Kenan	Reis	37	20015	Hemorrhoidectomy	1	3000
12	216	Kerem	Göver	48	20016	Hysterectomy	1	3250
13	217	Metin	Köker	50	20017	Hysteroscopy	1	3500
14	218	Berke	San	58	20018	Inguinal hernia repair	1	3750
15	219	Erkin	Gündemir	85	20019	Low back pain surgery	1	4000
16	220	Ahmet	Parlak	69	20020	Mastectomy	1	4250
17	221	Aleyna	Tilki	91	20021	Partial (segmental) mastectomy	1	4500
18	222	Mehmet	Gündüz	72	20022	Total (or simple) mastectomy	1	4750
19	223	Aslı	Şahin	24	20023	Modified radical mastectomy	1	5000
20	224	Selami	Şen	21	20024	Partial colectomy	1	5250
21	225	Enver	Bulut	63	20025	Cataract surgery	1	1250
22	225	Enver	Bulut	63	20025	Prostatectomy	1	5500
23	226	Kasım	Aralık	33	20026	Tonsillectomy	1	5750
24	227	Gökberk	Çelik	63	20027	Blood transfusions	1	6000
25	228	Kutay	Masat	20	20028	Prophylactic vaccinations and inoculati...	1	6250
26	244	Ayşe	Galip	56	20019	Cataract surgery	1	1250
27	245	Fatma	Galip	66	20020	Cataract surgery	1	1250
28	246	Hayriye	Osama	76	20021	Cataract surgery	1	1250
29	247	Serap	Muş	40	20022	Cataract surgery	1	1250
30	248	Fulya	Keriman	52	20023	Cataract surgery	4	1250

Query executed successfully.



**Attending\_Nurses**, lists all the information about the nurses and the staying patients which that nurse is attending to.

```

107 create view Attending_Nurses
108 as
109 Select e.EmployeeID,e.FirstName + e.LastName "Employee Name", s.Room, p.FirstName + p.LastName "Patient Name", p.PatientID
110 FROM Employee e
111 inner join Nurse n on e.EmployeeID=n.NurseID
112 inner join Undergoes u on u.NurseID=n.NurseID
113 inner join Stay s on s.StayID=u.StayID
114 inner join Patient p on p.PatientID=s.Patient
115
116 select * from Attending_Nurses
117

```

	EmployeeID	Employee Name	Room	Patient Name	PatientID
1	6	ZaferSu	1012	AsenaAlaca	205
2	3	VeliAkgül	1001	AsenaAlaca	205
3	4	ÇelikErimez	1002	AsnnArkut	206
4	3	VeliAkgül	1003	KemalDaner	207
5	7	KadirToprak	1013	AsnnArkut	206
6	4	ÇelikErimez	1014	KemalDaner	207
7	5	ErhanAydın	1005	HaticeKara	213
8	6	ZaferSu	1006	İpekMila	214
9	7	KadirToprak	1007	KenanReis	215
10	8	AyşeAteş	1008	KeremGöver	216
11	3	VeliAkgül	1009	MetinKöker	217
12	4	ÇelikErimez	1010	BerkeSan	218
13	3	VeliAkgül	1017	AhmetParlak	220
14	4	ÇelikErimez	1018	AleynaTilki	221
15	5	ErhanAydın	1019	MehmetGündüz	222
16	6	ZaferSu	1020	AslıŞahin	223
17	4	ÇelikErimez	1025	EnverBulut	225
18	2	MehmetKıran	1022	EnverBulut	225
19	3	VeliAkgül	1023	KasımAralık	226
20	3	VeliAkgül	1024	GökberkÇelik	227
21	4	ÇelikErimez	1025	EnverBulut	225

**Nurse\_count\_surgery**, lists information about all the nurses that attended one or more operations.

```

85 create view Nurse_count_surgery
86 as
87 select u.NurseID,Count(*) Count_join_surgery , s.Name from dbo.UnderGoes u join dbo.Surgery s on u.ProcedureID=s.ProcedureID where u.NurseID IS NOT NULL
88 group by u.NurseID,s.Name
89
90 select * from Nurse_count_surgery
91

```

	NurseID	Count_join_surgery	Name
1	3	1	Appendectomy
2	3	1	Blood transfusions
3	6	1	Breast biopsy
4	4	2	Cataract surgery
5	7	1	Cesarean section
6	6	1	Cesarean sections
7	3	1	Cholecystectomy
8	4	1	Coronary artery bypass
9	5	1	Free skin graft
10	7	1	Hemorrhoidectomy
11	8	1	Hysterectomy
12	3	1	Hysteroscopy
13	4	1	Inguinal hernia repair
14	3	1	Mastectomy
15	6	1	Modified radical mastectomy
16	4	1	Partial (segmental) mastectomy
17	3	1	Prophylactic vaccinations and inoculations
18	4	1	Prostatectomy
19	2	1	Tonsillectomy
20	5	1	Total (or simple) mastectomy

**Appointment\_Info**, lists all the people information and doctor information that took the medication Granidryl Aflucane.

```

119 create view Appointment_Info
120 as
121 Select e.FirstName + ' ' + e.LastName as DoctorFullName, ap.Date, pr.Medication,p.FirstName + ' ' + p.LastName as PatientFullName
122 From Employee e, Doctor d, Appointment ap, Prescription pr, Patient p
123 Where e.EmployeeID = d.DoctorID and d.DoctorID = ap.DoctorID and ap.PatientID = p.PatientID and ap.AppointmentID = pr.AppointmentID
124 and pr.Medication like 'Granidryl Aflucane'
125
126 select * from Appointment_Info
127

```

	DoctorFullName	Date	Medication	PatientFullName
1	Umut Dagtekin	2013-03-03	Granidryl Aflucane	Kenan Reis

**Find\_Doctors**, gives information about the doctors that attended at least two appointments and operated in at least one surgery.

```
129 create view Find_Doctors
130 as
131 Select e.EmployeeID, e.FirstName + ' ' + e.LastName as DoctorFullName, Count(e.EmployeeID) noOfUnderGoes, u.NurseID
132 From Employee e left outer join UnderGoes u on u.DoctorID=e.EmployeeID
133 where e.EmployeeID in (Select a.DoctorID
134                        from Appointment a
135                        group by a.DoctorID
136                        having count(*)>=2)
137 group by e.EmployeeID, e.FirstName + ' ' + e.LastName , u.DoctorID, u.NurseID
138 having count(*)>=1
139
140 select * from Find_Doctors
```

133 %				
Results Messages				
	EmployeeID	FullName	noOfUnderGoes	NurseID
1	22	Beril Çay	7	NULL
2	22	Beril Çay	1	5
3	22	Beril Çay	1	6
4	23	Sema Akdoğan	1	6
5	24	Sena Akin	1	NULL
6	24	Sena Akin	1	8
7	25	Filiz Alemdar	1	2
8	25	Filiz Alemdar	1	4
9	26	Mert Ozgen	1	NULL
10	26	Mert Ozgen	1	3
11	26	Mert Ozgen	1	7
12	27	Kor Kashani	1	3
13	27	Kor Kashani	1	6
14	28	Yamac Okur	1	3
15	28	Yamac Okur	2	4
16	28	Yamac Okur	1	7
17	29	Saygi Asena	1	NULL
18	30	Umut Dagtekin	1	NULL
19	31	Bartu Akbay	2	4
20	32	Tamaydin Sancakli	1	3
21	33	Emek Saka	2	NULL
22	34	Yurt Tiryaki	1	3
23	34	Yurt Tiryaki	1	5
24	35	Saru Sevgi	1	3

## Triggers:

**Update\_Employee**, after each insertion or update statement trigger calculates and updates the age column of that employee. After deletion the trigger deletes all records regarding that employee.

```
497
498 Create Trigger update_Employee
499 On Employee
500 After insert,delete,update
501 As
502 Begin
503     Update e
504     Set e.Age = DATEDIFF(year, e.DateOfBirth, GETDATE())
505     From Employee e inner join inserted as i on e.EmployeeID = i.EmployeeID
506
507     Delete From Doctor Where DoctorID in (Select EmployeeID from deleted)
508     DELETE FROM Appointment WHERE Appointment.DoctorID IN (SELECT EmployeeID FROM deleted)
509
510 End
511 Go
512
513 Delete From Employee Where EmployeeID = 1000
514 Drop trigger update_Employee
515
516
517
```

161 %

Messages

(0 rows affected)

(0 rows affected)

(0 rows affected)

(1 row affected)

Completion time: 2021-01-01T14:46:46.0568788+03:00

## BEFORE TRİGGER EXECUTED

DESKTOP-P3KLHEO....M - dbo.Employee									DESKTOP-P3KLHEO....STEM - dbo.Doctor									DESKTOP-P3KLHEO....M - dbo.App									DESKTOP-P3KLHEO....M - dbo.Employee									DESKTOP-P3KLHEO....M - dbo.Employee																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
EmployeeID	FirstName	LastName	Salary	DateOfBirth	Age	Gender	AddressID	PhoneNumber																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

## AFTER TRIGGER EXECUTED

EmployeeID	FirstName	LastName	Salary	DateOfBirth	Age	Gender	AddressID	PhoneNumber
49	Eylem	Mencik	4200	1976-11-15	44	F	10049	(857) 471-3639
50	Mevlut	Erdem	4200	1988-01-21	32	M	10050	(709) 681-3906
51	Erdener	Sancakli	4200	1975-05-10	45	M	10051	(963) 423-6190
52	Canga	Inal	4200	1969-05-04	51	M	10052	(694) 263-4821
53	Emir	Kashani	4200	1985-05-01	35	M	10053	(522) 940-1241
54	Tozan	Ozcelik	4200	1976-03-05	44	M	10054	(199) 266-3595
55	Sogut	Naol	4200	1993-09-19	27	M	10055	(701) 169-8366
56	Hayir	Sabri	4200	1984-05-23	36	M	10056	(576) 940-1884
57	Altis	Altun	4200	1981-03-31	39	M	10057	(650) 218-2074
58	Varol	Batuk	4200	1977-06-01	43	M	10058	(588) 445-1469
59	Sahin	Sarper	4200	1966-10-19	54	M	10059	(229) 881-4960
60	Saru	Dogu	4200	1988-06-30	32	M	10060	(222) 124-1475
61	Aydinyol	Önder	1000	1966-08-23	54	M	10061	(933) 999-3682
62	Ilgin	Topcu	1000	1973-06-06	47	F	10062	(886) 820-4146
63	Han	Kaptan	1000	1982-10-24	38	M	10063	(680) 251-4561
64	Aksuner	Sasmaz	1000	1990-06-13	30	M	10064	(172) 661-7129
65	Aytop	Niaz	1000	1980-03-10	40	F	10065	(508) 635-4479
66	Fatmagul	Kavak	1000	1967-05-16	53	F	10066	(384) 827-8055
67	Nil	Dal	1000	1993-10-27	27	F	10067	(918) 127-2493
68	Nur	Konca	1000	1976-11-24	44	F	10068	(686) 345-9834
69	Nezih	Topal	1000	1970-10-30	50	F	10069	(279) 694-1736
70	Sumer	Baykara	1000	1966-11-16	24	F	10070	(159) 907-3497
71	Aydan	Bozguney	1000	1975-05-16	45	F	10071	(104) 494-0846
72	Suat	Canus	1000	1969-05-24	51	F	10072	(598) 281-7848
73	Nehir	Aygun	1000	1983-05-10	35	F	10073	(773) 405-4095
74	Buke	Dincer	1000	1991-12-14	29	F	10074	(148) 997-1546
75	Nevin	Sahin	1000	1993-01-14	27	F	10075	(736) 613-9656
76	Sibel	Evren	12000	1973-12-17	47	F	10076	(201) 910-2420
77	Pak	Çağlayan	13000	1976-03-15	44	F	10077	(557) 488-8595
78	Arman	Yasin	8700	1988-01-25	32	M	10078	(778) 734-3217
79	Ovunc	Reyramoglu	7500	1979-04-21	41	M	10079	(448) 594-8189
80	Isitan	Efendi	8900	1996-11-26	24	M	10080	(239) 375-1856
81	Tansu	Buldan	8600	1978-05-06	42	M	10081	(968) 784-5122
82	Karagoz	Calik	7600	1988-01-03	32	M	10082	(955) 327-2011
83	Umut	Aykac	9300	1993-04-21	25	M	10083	(280) 797-7602
84	Nur	Bayi	10500	1990-10-11	30	F	10084	(536) 631-8833
85	Eda	Samdereli	11200	1986-10-13	34	F	10085	(300) 474-3804
86	Torlak	Ozgoz	3000	1975-04-29	45	F	10086	(151) 635-7235
87	Sezen	Gokay	3000	1996-11-01	24	F	10087	(460) 663-9702
88	Polat	Peker	3000	1975-05-01	45	M	10088	(852) 118-8956
89	Firat	Gul	3000	1976-11-15	44	M	10089	(756) 951-7196
90	Taner	Gozubuyuk	3000	1988-01-21	32	M	10090	(970) 243-7077
91	Erbey	Karadag	3000	1975-05-10	45	M	10091	(298) 848-3810
92	Cahit	Kutlu	3000	1969-05-04	51	M	10092	(680) 118-7606
93	Taslim	Atan	3000	1983-09-01	39	M	10093	(371) 829-6302
94	Yel	Yenal	3000	1976-02-05	44	M	10094	(952) 398-9409
95	Umu	Kose	3000	1993-09-19	27	M	10095	(343) 306-5309
96	Ekin	Orbay	2000	1984-05-23	36	M	10096	(949) 735-4900
97	Bike	Namık	3000	1985-05-14	35	M	10097	(450) 712-3295
98	Biricik	Karabulut	3000	1988-01-23	32	F	10098	(772) 971-4268
99	Inal	Baydar	3000	1975-04-29	45	F	10099	(853) 336-4522
100	Idil	Uner	3000	1996-11-16	24	F	10100	(206) 504-9739
150	Ayşe	Burçak	4200	1990-12-03	30	M	20030	(152) 398-8269
•	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

AppointmentID	DoctorID	PatientID	Date
401	25	202	1999-03-30
402	35	203	2005-04-05
403	28	204	2008-11-13
404	27	205	2012-12-12
405	32	206	2010-03-23
406	33	207	2019-12-25
407	28	208	2020-11-10
408	26	213	2017-06-15
409	31	214	2018-10-12
410	30	215	2013-03-03
411	34	216	2009-09-09
412	28	217	2018-04-23
413	31	218	2020-07-28
414	32	219	2006-02-12
415	33	205	2009-06-16
416	34	206	2017-06-15
417	22	207	2018-09-11
418	26	208	2020-10-10
419	24	205	2014-09-16
420	35	220	2017-06-15
421	25	221	2020-01-01
422	26	222	2006-04-30
423	27	223	2010-07-14
424	28	224	2020-07-04
425	31	225	2020-05-01
426	32	226	2017-06-15
427	33	227	2005-01-01
428	34	225	2008-08-08
429	21	226	2012-02-28
430	22	227	2017-06-15
431	23	228	2017-03-08
432	24	229	2013-05-30
433	25	230	2017-06-16
434	26	203	2015-06-27
435	27	204	2019-06-16
436	28	205	2015-02-13
437	29	206	2018-01-27
438	30	207	2017-06-15
439	31	208	2019-08-10
440	32	209	2018-12-11
441	33	216	2017-06-15
442	34	217	2017-06-15
443	35	218	2019-12-31
444	23	219	2013-10-09
445	24	220	2016-02-04
446	25	221	2014-10-11
447	26	222	2012-03-01
448	27	223	2013-10-15
449	29	211	2017-06-15
450	30	212	2015-06-02
999	22	202	2018-12-01
•	NULL	NULL	NULL

## Procedures:

**GetCataractPatients**, finds all the people that had multiple cataract surgeries that are older than 40 and Female. Lists their name age gender and Doctor name that did the surgery.

```
142 --Stored Procedures
143 --Information of all the female over 40 patients that had cataract surgery and the doctor that performed it
144 CREATE PROCEDURE GetCataractPatients
145 AS
146 BEGIN
147 SET NOCOUNT ON
148 Select pa.PatientID, pa.FirstName, pa.LastName, pa.Age, pa.Gender, e.FirstName + ' ' + E.LastName as Doctor_Full_Name, do.DoctorID
149 From Employee e inner join Doctor do on e.EmployeeID = do.DoctorID inner join UnderGoes u on do.DoctorID = u.DoctorID inner join Patient pa on pa.PatientID = u.PatientID
150 Where pa.PatientID in (SELECT p.PatientID
151 FROM Patient p
152 WHERE p.PatientID IN
153 ( SELECT u.PatientID
154 FROM UnderGoes u
155 LEFT JOIN Surgery s ON u.ProcedureID=s.ProcedureID
156 WHERE s.Name like 'Cataract surgery' and p.Age>=40 and p.Gender like 'F'));
157 END
158
159 exec GetCataractPatients
```

	PatientID	FirstName	LastName	Age	Gender	Doctor_Full_Name	DoctorID
1	244	Ayşe	Galip	56	F	Beril Çay	22
2	245	Fatma	Galip	66	F	Beril Çay	22
3	246	Hayriye	Osama	76	F	Beril Çay	22
4	247	Serap	Muş	40	F	Beril Çay	22
5	248	Fulya	Keriman	52	F	Beril Çay	22
6	248	Fulya	Keriman	52	F	Beril Çay	22
7	248	Fulya	Keriman	52	F	İdil Kızıl	21
8	248	Fulya	Keriman	52	F	Beril Çay	22

**insertPatient**, creates and inserts a patient into the Patient table.

```
163 --Insert Patient
164 CREATE PROCEDURE insertPatient
165     @PatientID          int = NULL ,
166     @FirstName          NVARCHAR(50) = NULL ,
167     @LastName           NVARCHAR(50) = NULL ,
168     @AddressID          int = NULL,
169     @Age                int = NULL,
170     @Gender             VARCHAR(1) = NULL
171 AS
172 BEGIN
173     SET NOCOUNT ON
174
175     INSERT INTO dbo.Patient
176     (
177         PatientID          ,
178         FirstName          ,
179         LastName           ,
180         AddressID          ,
181         Age                ,
182         Gender
183     )
184     VALUES
185     (
186         @PatientID,
187         @FirstName,
188         @LastName,
189         @AddressID,
190         @Age,
191         @Gender
192     )
193
194 END
195
196 GO
197 SET IDENTITY_INSERT Patient ON
198
199 EXEC insertPatient
200     @PatientID = 300 ,
201     @FirstName = 'Ali',
202     @LastName = 'Çelik',
203     @AddressID = 20030,
204     @Gender = 'M'
```



TABLE BEFORE PROCEDURE EXECUTE

PatientID	FirstName	LastName	AddressID	Aqe	Gender
201	Hasan	Mutlucan	20001	25	M
202	Cemil	Duymaz	20002	31	M
203	Erkan	Petek	20003	67	M
204	Halil	Gök	20004	23	M
205	Asena	Alaca	20005	45	F
206	Asrın	Arkut	20006	55	M
207	Kemal	Daner	20007	56	M
208	Zeynel	Üçyurt	20008	49	M
209	Kasım	Fırat	20009	51	M
210	Merve	Ertuğ	20010	27	F
211	Merve	Besen	20011	18	F
212	Fatma	Aydın	20012	22	F
213	Hatice	Kara	20013	31	F
214	İpek	Mila	20014	33	F
215	Kenan	Reis	20015	37	M
216	Kerem	Göver	20016	48	M
217	Metin	Köker	20017	50	M
218	Berke	Sarı	20018	58	M
219	Erkin	Gündemir	20019	85	M
220	Ahmet	Parlak	20020	69	M
221	Aleyna	Tilki	20021	91	F
222	Mehmet	Gündüz	20022	72	M
223	Aslı	Şahin	20023	24	F
224	Selami	Şen	20024	21	M
225	Enver	Bulut	20025	63	M
226	Kasım	Aralık	20026	33	M
227	Gökberk	Çelik	20027	63	M
228	Kutay	Masat	20028	20	M
229	Tayyip	Erken	20029	11	M
230	Kerem	Akın	20030	88	M
232	Ahmet	Mehmet	20025	99	M
244	Ayşe	Galip	20019	56	F
245	Fatma	Galip	20020	66	F
246	Hayriye	Osama	20021	76	F
247	Serap	Muş	20022	40	F
248	Fulya	Keriman	20023	52	F
•	NULL	NULL	NULL	NULL	NULL

TABLE AFTER PROCEDURE EXECUTE

PatientID	FirstName	LastName	AddressID	Aqe	Gender
201	Hasan	Mutlucan	20001	25	M
202	Cemil	Duymaz	20002	31	M
203	Erkan	Petek	20003	67	M
204	Halil	Gök	20004	23	M
205	Asena	Alaca	20005	45	F
206	Asrın	Arkut	20006	55	M
207	Kemal	Daner	20007	56	M
208	Zeynel	Üçyurt	20008	49	M
209	Kasım	Fırat	20009	51	M
210	Merve	Ertuğ	20010	27	F
211	Merve	Besen	20011	18	F
212	Fatma	Aydın	20012	22	F
213	Hatice	Kara	20013	31	F
214	İpek	Mila	20014	33	F
215	Kenan	Reis	20015	37	M
216	Kerem	Göver	20016	48	M
217	Metin	Köker	20017	50	M
218	Berke	Sarı	20018	58	M
219	Erkin	Gündemir	20019	85	M
220	Ahmet	Parlak	20020	69	M
221	Aleyna	Tilki	20021	91	F
222	Mehmet	Gündüz	20022	72	M
223	Aslı	Şahin	20023	24	F
224	Selami	Şen	20024	21	M
225	Enver	Bulut	20025	63	M
226	Kasım	Aralık	20026	33	M
227	Gökberk	Çelik	20027	63	M
228	Kutay	Masat	20028	20	M
229	Tayyip	Erken	20029	11	M
230	Kerem	Akın	20030	88	M
232	Ahmet	Mehmet	20025	99	M
244	Ayşe	Galip	20019	56	F
245	Fatma	Galip	20020	66	F
246	Hayriye	Osama	20021	76	F
247	Serap	Muş	20022	40	F
248	Fulya	Keriman	20023	52	F
300	Ali	Çelik	20030	NULL	M
•	NULL	NULL	NULL	NULL	NULL

**insertEmployee**, creates and inserts an employee into the Employee table.

```

211 CREATE PROCEDURE insertEmployee
212     @EmployeeID
213     @FirstName
214     @LastName
215     @Salary
216     @DateOfBirth
217     @Age
218     @Gender
219     @AddressID
220     @PNumber
221 AS
222 BEGIN
223     SET NOCOUNT ON
224
225     INSERT INTO dbo.Employee
226     (
227         EmployeeID
228         ,FirstName
229         ,LastName
230         ,Salary
231         ,DateOfBirth
232         ,Age
233         ,Gender
234         ,AddressID
235         ,PNumber
236     )
237     VALUES
238     (
239         @EmployeeID
240         ,@FirstName
241         ,@LastName
242         ,@Salary
243         ,@DateOfBirth
244         ,@Age
245         ,@Gender
246         ,@AddressID
247         ,@PNumber
248     )
249 END
250 GO
251 SET IDENTITY_INSERT Employee ON
252 EXEC insertEmployee
253     @EmployeeID = 150
254     ,@FirstName = 'Ayse'
255     ,@LastName = 'Burcak'
256     ,@Salary = '4200'
257     ,@DateOfBirth = '1990-12-03'
258     ,@Age = NULL
259     ,@Gender = 'M'
260     ,@AddressID = 20030
261     ,@PNumber = '(152) 398-8269'
262 --Create Address

```

*TABLE BEFORE PROCEDURE EXECUTE*

EmployeeID	FirstName	LastName	Salary	DateOfBirth	Age	Gender	AddressID	PhoneNumber
40	Akbug	Sarik	4200	1975-05-01	45	M	10048	(915) 326-9600
41	Eylem	Mencik	4200	1976-11-15	44	F	10049	(937) 471-3639
50	Mehtap	Erdem	4200	1988-01-21	32	M	10050	(709) 891-8900
51	Erdener	Sancakli	4200	1975-05-10	45	M	10051	(906) 423-8100
52	Cengiz	Isel	4200	1969-05-04	51	M	10052	(986) 320-4511
53	Enver	Kazhanli	4200	1985-05-01	35	M	10053	(532) 860-1351
54	Iszan	Ozcelik	4200	1974-03-05	44	M	10054	(199) 266-3905
55	Seygut	Nazif	4200	1993-09-19	27	M	10055	(701) 169-8366
56	Hayat	Sabri	4200	1984-05-23	38	M	10056	(376) 949-1884
57	Alkis	Alkanan	4200	1981-03-31	39	M	10057	(850) 218-2074
58	Vahid	Batuk	4200	1977-06-01	43	M	10058	(588) 445-1469
59	Sahin	Serper	4200	1966-10-19	54	M	10059	(229) 881-4860
60	Saru	Dogru	4200	1968-06-30	52	M	10060	(222) 124-1475
61	Aydinli	Önder	1000	1966-08-23	54	M	10061	(933) 999-3682
62	Ilginc	Topcu	1500	1978-06-06	47	F	10062	(880) 132-4448
63	Kaplan	Isak	1000	1982-10-24	38	M	10063	(606) 211-4689
64	Aksumner	Sennet	1000	1990-06-13	30	M	10064	(172) 861-7129
65	Ayfer	Naci	1000	1980-03-10	40	F	10065	(508) 635-4749
66	Fatmagül	Kavak	1000	1967-05-16	53	F	10066	(384) 627-8570
67	Nil	Del	1000	1993-10-27	27	F	10067	(918) 127-4249
68	Nur	Kemca	1000	1976-11-24	44	F	10068	(888) 345-9824
69	Nazhe	Topal	1000	1970-10-30	50	F	10069	(279) 894-1736
70	Sumer	Baykara	1000	1996-11-26	24	F	10070	(159) 907-3487
71	Aydan	Bocuganyu	1000	1975-05-16	45	F	10071	(104) 494-0065
72	Suat	Cevus	1000	1958-05-24	51	F	10072	(598) 281-7374
73	Nazir	Aygun	1000	1985-05-10	35	F	10073	(770) 901-4801
74	Baki	Diviner	1000	1991-12-19	29	F	10074	(148) 991-7146
75	Nevlin	Sahin	1000	1993-01-14	27	F	10075	(736) 613-5656
76	Sibel	Eren	12000	1973-12-17	47	F	10076	(201) 910-2403
77	Pak	Çaylayan	13000	1976-03-15	44	F	10077	(537) 488-8395
78	Ahmet	Yasin	8700	1988-01-25	32	M	10078	(778) 734-3127
79	Övenc	Bayramoglu	7500	1979-04-21	41	M	10079	(448) 584-8189
80	Isitan	Efendi	8800	1996-11-26	24	M	10080	(239) 375-1856
81	Tansu	Buldan	8800	1978-05-06	42	M	10081	(988) 734-5122
82	Karagöz	Calik	7600	1988-01-03	32	M	10082	(955) 327-2011
83	Ömüt	Aykar	6300	1995-04-21	25	M	10083	(202) 797-7602
84	Nur	Iskender	1000	1990-11-11	29	F	10084	(536) 616-1033
85	Eda	Sanderli	11200	1986-10-13	34	F	10085	(304) 474-3004
86	Sorkat	Özgüç	3000	1975-04-29	45	F	10086	(151) 651-7235
87	Sezen	Gökay	3000	1996-11-01	24	F	10087	(460) 663-9702
88	Polat	Peker	3000	1975-05-01	45	M	10088	(852) 118-8556
89	Firat	Gül	3000	1976-11-15	44	M	10089	(756) 891-7196
90	Taner	Gözübuğuk	3000	1988-01-21	32	M	10090	(970) 243-7070
91	Erbey	Karadag	3000	1975-05-10	45	M	10091	(208) 848-2811
92	Caht	Kutlu	3000	1969-05-04	51	M	10092	(680) 118-7606
93	Teskin	Atan	3000	1983-05-01	35	M	10093	(371) 829-6302
94	Yel	Yenal	3000	1976-05-25	44	M	10094	(952) 396-4200
95	Kiase	3300	1993-09-19	27	M	10095	(340) 306-3058	
96	Orhan	Orbay	3000	1984-05-23	36	M	10096	(940) 715-8009
97	Bike	Nemik	3000	1983-05-14	35	M	10097	(450) 712-3905
98	Biricik	Karabulut	3000	1989-01-23	32	F	10098	(772) 971-4268
99	inali	Buyder	3000	1975-04-29	45	F	10099	(833) 138-4322
100	Isid	Uner	3000	1996-11-16	24	F	10100	(206) 504-9739
	NULE	NULE	NULE	NULE	NULE	NULE	NULE	NULE

TABLE AFTER PROCEDURE EXECUTE

	DEKTOP-P3XHEO-M - docEmployee	X	DEKTOP-P3XHEO-TRM - docPatriot	DEKTOP-P3XHEO-M - docAddresses	HASMAP - DEKTOP-P3XHEO-E-0279				
DESK	EmployeeID	FirstName	LastName	SALARY	DateOfBirth	Age	Gender	AddressID	PhoneNumber
	49	Eylem	Mencik	4200	1978-11-15	44	F	10049	(837) 471-3639
	50	Mehut	Erdem	4200	1988-01-21	32	M	10050	(709) 681-3906
	51	Enderer	Sancaklı	4200	1975-05-10	45	M	10051	(963) 423-6190
	52	Canga	Inal	4200	1989-05-04	31	M	10052	(994) 263-4821
	53	Emir	Kashani	4200	1985-05-01	35	M	10053	(522) 940-1241
	54	Tosan	Ozcelik	4200	1976-03-05	44	M	10054	(199) 266-3395
	55	Sogut	Nazim	4200	1993-09-19	27	M	10055	(701) 109-8306
	56	Selen	Satici	10600	1984-01-23	36	F	10056	(578) 948-1854
	57	Altin	Akinci	4200	1981-03-31	39	M	10057	(493) 216-2074
	58	Vasıl	Batak	4200	1977-06-01	43	M	10058	(388) 485-1469
	59	Sahin	Serper	4200	1966-10-19	54	M	10059	(229) 881-4990
	60	Saru	Dogu	4200	1988-06-30	32	M	10060	(232) 124-1475
	61	Jaydmyel	Onder	1000	1968-08-23	54	M	10061	(933) 999-3682
	62	Ilgan	Topcu	1000	1977-06-06	47	F	10062	(886) 320-4146
	63	Hicm	Kaplan	1000	1982-10-24	38	M	10063	(682) 251-4861
	64	Akkuner	Seozmaz	1000	1990-06-13	30	M	10064	(172) 661-7129
	65	Aytop	Nazi	1000	1980-03-10	40	F	10065	(508) 635-4479
	66	Fetmagul	Kavak	1000	1995-10-16	23	F	10066	(384) 627-0370
	67	Nal	Dil	1000	1993-07-27	27	F	10067	(918) 127-2493
	68	Noor	Kanca	1000	1976-11-24	44	F	10068	(886) 343-9824
	69	Nesizhe	Topal	1000	1979-10-20	40	F	10069	(279) 887-8396
	70	Sumner	Baykara	1000	1991-01-16	24	F	10070	(186) 963-3497
	71	Aydhan	Bonguney	1000	1975-05-16	45	F	10071	(104) 484-0846
	72	Suat	Cevus	1000	1969-05-24	51	F	10072	(598) 281-7848
	73	Nehir	Aygun	1000	1985-05-10	35	F	10073	(775) 805-4095
	74	Buke	Dincer	1000	1991-12-14	29	F	10074	(148) 997-1546
	75	Nevin	Sahin	1000	1993-01-14	27	F	10075	(736) 613-5656
	76	Sibel	Evcen	12000	1972-12-17	47	F	10076	(201) 910-2430
	77	Pak	Caglayan	13000	1976-03-15	44	F	10077	(557) 488-8995
	78	Annam	Vasin	8700	1988-01-25	32	M	10078	(778) 734-3217
	79	Orkan	Bayramoglu	7500	1979-04-21	41	M	10079	(448) 594-0189
	80	Ivanc	Efendi	8900	1996-11-26	24	M	10080	(239) 375-1836
	81	Tamuz	Baldin	8600	1979-05-06	42	M	10081	(989) 784-5122
	82	Karagöz	Calık	7600	1988-05-03	32	M	10082	(952) 321-2911
	83	Umut	Aykici	8000	1995-04-29	25	M	10083	(268) 787-7602
	84	Nur	Buye	10500	1990-10-11	30	F	10084	(336) 631-8833
	85	Eda	Samedelli	11200	1988-10-13	34	F	10085	(303) 474-3804
	86	Torlak	Ozoguz	3000	1975-04-29	45	F	10086	(151) 635-7235
	87	Sezen	Gokay	3000	1986-11-01	34	F	10087	(460) 663-8702
	88	Polat	Peker	3000	1975-05-01	45	M	10088	(852) 118-8956
	89	Finat	Gul	2000	1978-11-15	44	M	10089	(756) 951-7196
	90	Taner	Gozubuyuk	3000	1988-01-21	32	M	10090	(970) 243-7070
	91	Erbay	Karadag	3000	1975-05-10	45	M	10091	(288) 848-3810
	92	Cahit	Kutlu	3000	1969-05-01	51	M	10092	(880) 118-7606
	93	Teskin	Atan	3000	1985-05-01	35	M	10093	(371) 829-6302
	94	Yed	Yenal	3000	1976-03-05	44	M	10094	(952) 398-6409
	95	Umuq	Kone	3000	1993-09-19	27	M	10095	(343) 266-3395
	96	Ekin	Orbay	3000	1984-01-23	36	M	10096	(949) 712-4900
	97	Biric	Karakılıç	3000	1995-05-14	25	M	10097	(493) 712-3295
	98	Biricik	Namıkaliut	3000	1988-01-23	32	F	10098	(772) 971-4268
	99	İnal	Baytar	3000	1975-04-29	45	F	10099	(853) 336-4322
	100	İdrî	Uner	3000	1996-11-16	24	F	10100	(206) 504-9739
	101	Zeyse	Burçak	4200	1990-12-03	30	M	20030	(152) 398-8269
•	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

insertAddress, creates and inserts an Addresses into the Address table.

```

262 --Create Address
263 CREATE PROCEDURE insertAddress
264     @AddressID int = NULL,
265     @State NVARCHAR(50) = NULL,
266     @City NVARCHAR(50) = NULL,
267     @ZipCode NVARCHAR(50) = NULL
268
269 AS
270 BEGIN
271     SET NOCOUNT ON
272
273     INSERT INTO dbo.Addresses
274     (
275         AddressID,
276         State,
277         City,
278         ZipCode
279     )
280     VALUES
281     (
282         @AddressID,
283         @State,
284         @City,
285         @ZipCode
286     )
287
288 END
289
290 GO
291 SET IDENTITY_INSERT Addresses ON
292
293 exec insertAddress
294     @AddressID = 20050,
295     @State = 'Türkiye',
296     @City = 'Ankara',
297     @ZipCode = '3100'

```

TABLE BEFORE PROCEDURE EXECUTE

AddressID	State	City	ZipCode
10078	Türkiye	Istanbul	34628
10079	Türkiye	Istanbul	34544
10080	Türkiye	Istanbul	35422
10081	Türkiye	Istanbul	34620
10082	Türkiye	Istanbul	34521
10083	Türkiye	Istanbul	34333
10084	Türkiye	Istanbul	34232
10085	Türkiye	Istanbul	34125
10086	Türkiye	Istanbul	34620
10087	Türkiye	Istanbul	34521
10088	Türkiye	Istanbul	34333
10089	Türkiye	Istanbul	34232
10090	Türkiye	Istanbul	34125
10091	Türkiye	Istanbul	34857
10092	Türkiye	Istanbul	34659
10093	Türkiye	Istanbul	35268
10094	Türkiye	Istanbul	34312
10095	Türkiye	Istanbul	34254
10096	Türkiye	Istanbul	34560
10097	Türkiye	Istanbul	34125
10098	Türkiye	Istanbul	34857
10099	Türkiye	Istanbul	34659
10100	Türkiye	Istanbul	35268
20001	Türkiye	Istanbul	34160
20002	Türkiye	Istanbul	34205
20003	Türkiye	Istanbul	34025
20004	Türkiye	Istanbul	34222
20005	Türkiye	Istanbul	34578
20006	Türkiye	Istanbul	34374
20007	Türkiye	Istanbul	34241
20008	Türkiye	Istanbul	34254
20009	Türkiye	Istanbul	34628
20010	Türkiye	Istanbul	34544
20011	Türkiye	Istanbul	35422
20012	Türkiye	Istanbul	34620
20013	Türkiye	Istanbul	34521
20014	Türkiye	Istanbul	34333
20015	Türkiye	Istanbul	34232
20016	Türkiye	Istanbul	34254
20017	Türkiye	Istanbul	34560
20018	Türkiye	Istanbul	34125
20019	Türkiye	Istanbul	34857
20020	Türkiye	Istanbul	34659
20021	Türkiye	Istanbul	35268
20022	Türkiye	Istanbul	34374
20023	Türkiye	Istanbul	34241
20024	Türkiye	Istanbul	34254
20025	Türkiye	Istanbul	34560
20026	Türkiye	Istanbul	34125
20027	Türkiye	Istanbul	34857
20028	Türkiye	Istanbul	34102
20029	Türkiye	Istanbul	34160
20030	Türkiye	Istanbul	34205
NULL	NULL	NULL	NULL

TABLE AFTER PROCEDURE EXECUTE

AddressID	State	City	ZipCode
10079	Türkiye	Istanbul	34544
10080	Türkiye	Istanbul	35422
10081	Türkiye	Istanbul	34620
10082	Türkiye	Istanbul	34521
10083	Türkiye	Istanbul	34333
10084	Türkiye	Istanbul	34232
10085	Türkiye	Istanbul	34125
10086	Türkiye	Istanbul	34620
10087	Türkiye	Istanbul	34521
10088	Türkiye	Istanbul	34333
10089	Türkiye	Istanbul	34232
10090	Türkiye	Istanbul	34125
10091	Türkiye	Istanbul	34857
10092	Türkiye	Istanbul	34659
10093	Türkiye	Istanbul	35268
10094	Türkiye	Istanbul	34312
10095	Türkiye	Istanbul	34254
10096	Türkiye	Istanbul	34560
10097	Türkiye	Istanbul	34125
10098	Türkiye	Istanbul	34857
10099	Türkiye	Istanbul	34659
10100	Türkiye	Istanbul	35268
20001	Türkiye	Istanbul	34160
20002	Türkiye	Istanbul	34205
20003	Türkiye	Istanbul	34025
20004	Türkiye	Istanbul	34222
20005	Türkiye	Istanbul	34578
20006	Türkiye	Istanbul	34374
20007	Türkiye	Istanbul	34241
20008	Türkiye	Istanbul	34254
20009	Türkiye	Istanbul	34628
20010	Türkiye	Istanbul	34544
20011	Türkiye	Istanbul	35422
20012	Türkiye	Istanbul	34620
20013	Türkiye	Istanbul	34521
20014	Türkiye	Istanbul	34333
20015	Türkiye	Istanbul	34232
20016	Türkiye	Istanbul	34254
20017	Türkiye	Istanbul	34560
20018	Türkiye	Istanbul	34125
20019	Türkiye	Istanbul	34857
20020	Türkiye	Istanbul	34659
20021	Türkiye	Istanbul	35268
20022	Türkiye	Istanbul	34374
20023	Türkiye	Istanbul	34241
20024	Türkiye	Istanbul	34254
20025	Türkiye	Istanbul	34560
20026	Türkiye	Istanbul	34125
20027	Türkiye	Istanbul	34857
20028	Türkiye	Istanbul	34102
20029	Türkiye	Istanbul	34160
20030	Türkiye	Istanbul	34205
20050	Türkiye	Ankara	3100
NULL	NULL	NULL	NULL

**insertAppointment**, creates and inserts an Appointment into the Appointment table.

```

300 --Create Appointment 5
301 CREATE PROCEDURE insertAppointment
302     @AppointmentID int = NULL ,
303     @DoctorID int = NULL ,
304     @PatientID int = NULL ,
305     @Date date = NULL
306
307
308
309 AS
310 BEGIN
311     SET NOCOUNT ON
312
313     INSERT INTO dbo.Appointment
314     (
315         AppointmentID ,
316         DoctorID ,
317         PatientID ,
318         Date
319     )
320     VALUES
321     (
322         @AppointmentID ,
323         @DoctorID ,
324         @PatientID ,
325         @Date
326     )
327
328 END
329
330 GO
331 SET IDENTITY_INSERT Appointment ON
332 SET IDENTITY_INSERT Employee OFF
333
334 exec insertAppointment
335     @AppointmentID = 999 ,
336     @DoctorID = 22 ,
337     @PatientID = 202 ,
338     @Date = '2018-12-01'

```

TABLE BEFORE PROCEDURE EXECUTE

AppointmentID	DoctorID	PatientID	Date
402	25	202	1999-03-30
403	35	203	2005-04-05
404	28	204	2008-11-13
405	27	205	2012-12-12
406	32	206	2010-03-23
407	33	207	2019-12-25
408	28	208	2020-11-10
409	26	213	2017-06-15
410	31	214	2018-10-12
411	30	215	2013-03-03
412	34	216	2009-09-09
413	28	217	2018-04-23
414	31	218	2020-07-28
415	32	219	2006-02-12
416	33	205	2009-06-16
417	34	206	2017-06-15
418	22	207	2018-06-11
419	26	208	2020-10-10
420	24	205	2014-09-16
421	35	220	2017-06-15
422	25	221	2020-01-01
423	26	222	2006-04-30
424	27	223	2010-07-14
425	28	224	2020-07-04
426	31	225	2020-05-01
427	32	226	2017-06-15
428	33	227	2005-01-01
429	34	225	2008-08-08
430	21	226	2012-02-28
431	22	227	2017-06-15
432	23	228	2017-03-08
433	24	229	2013-05-30
434	25	230	2017-06-16
435	26	203	2015-06-27
436	27	204	2019-06-16
437	28	205	2015-02-13
438	29	206	2018-01-27
439	30	207	2017-06-15
440	31	208	2019-08-10
441	32	209	2018-12-11
442	33	216	2017-06-15
443	34	217	2017-06-15
444	35	218	2019-12-31
445	23	219	2013-10-09
446	24	220	2016-02-04
447	25	221	2014-10-11
448	26	222	2012-03-01
449	27	223	2013-10-15
450	29	211	2017-06-15
451	30	212	2015-06-02
999	22	202	2018-12-01
NULL	NULL	NULL	NULL

TABLE AFTER PROCEDURE EXECUTE

AppointmentID	DoctorID	PatientID	Date
402	25	202	1999-03-30
403	35	203	2005-04-05
404	28	204	2008-11-13
405	27	205	2012-12-12
406	32	206	2010-03-23
407	33	207	2019-12-25
408	28	208	2020-11-10
409	26	213	2017-06-15
410	31	214	2018-10-12
411	30	215	2013-03-03
412	34	216	2009-09-09
413	28	217	2018-04-23
414	31	218	2020-07-28
415	32	219	2006-02-12
416	33	205	2009-06-16
417	34	206	2017-06-15
418	22	207	2018-06-11
419	26	208	2020-10-10
420	24	205	2014-09-16
421	35	220	2017-06-15
422	25	221	2020-01-01
423	26	222	2006-04-30
424	27	223	2010-07-14
425	28	224	2020-07-04
426	31	225	2020-05-01
427	32	226	2017-06-15
428	33	227	2005-01-01
429	34	225	2008-08-08
430	21	226	2012-02-28
431	22	227	2017-06-15
432	23	228	2017-03-08
433	24	229	2013-05-30
434	25	230	2017-06-16
435	26	203	2015-06-27
436	27	204	2019-06-16
437	28	205	2015-02-13
438	29	206	2018-01-27
439	30	207	2017-06-15
440	31	208	2019-08-10
441	32	209	2018-12-11
442	33	216	2017-06-15
443	34	217	2017-06-15
444	35	218	2019-12-31
445	23	219	2013-10-09
446	24	220	2016-02-04
447	25	221	2014-10-11
448	26	222	2012-03-01
449	27	223	2013-10-15
450	29	211	2017-06-15
451	30	212	2015-06-02
999	22	202	2018-12-01
NULL	NULL	NULL	NULL

**emp\_for\_raise\_proc**, takes employee id as input and checks if that employee's salary is below 5000. If it is prints out the result accordingly.

```
340 --
341 CREATE PROCEDURE emp_for_raise_proc
342 (@p_empid int)
343 AS
344 DECLARE
345     @v_empsalary int,
346     @v_empname nvarchar(50)
347 BEGIN
348     SELECT @v_empsalary = Salary , @v_empname = LastName
349     FROM Employee e, Doctor do
350     WHERE e.EmployeeID = @p_empid
351
352     IF (@v_empsalary < 5000)
353     PRINT 'This employee is up for a raise --&gt; ' + @v_empname
354     ELSE
355     PRINT 'This employees is not up for a raise -- &gt; ' + @v_empname
356 END
357
358 EXEC emp_for_raise_proc 36
359
360 DROP PROCEDURE emp_for_raise_proc
361 --
362 CREATE PROCEDURE check_salary_raise
363 (@p_employeeID int)
364 AS
365 DECLARE
366     @v_empSalary int ,
367     @v_empName nvarchar(25)
```

133 %

Messages

This employee is up for a raise --&gt; Savas

Completion time: 2020-12-30T19:14:30.5050861+03:00

**check\_salary\_raise**, raises the given employee's salary if they need it and prints out the result salary.

```
360 DROP PROCEDURE emp_for_raise_proc
361 --
362 CREATE PROCEDURE check_salary_raise
363 (@p_employeeID int)
364 AS
365 DECLARE
366     @v_empSalary int ,
367     @v_empName nvarchar(25)
368 BEGIN
369     SELECT @v_empSalary = Salary , @v_empName = FirstName + LastName
370     FROM Employee
371     WHERE EmployeeID = @p_employeeID
372
373     PRINT 'Current Salary for employee is : ' + CAST(@v_empSalary AS VARCHAR) + ' (' + @v_empName + ')'
374
375     IF @v_empSalary > 5000
376     PRINT 'Greater than 5000'
377     ELSE IF @v_empSalary = 5000
378     PRINT 'Equal to 5000'
379     ELSE
380     BEGIN
381         PRINT 'Less than 5000'
382         UPDATE Employee SET Salary = Salary * 1.1 WHERE EmployeeID = @p_employeeID
383         -- Print new price
384         SELECT @v_empSalary = Salary , @v_empName = FirstName + LastName
385         FROM Employee
386         WHERE EmployeeID = @p_employeeID
387         PRINT 'Current Salary is : ' + CAST(@v_empSalary AS VARCHAR) + ' (' + @v_empName + ')'
388     END
389 END
390
391 EXEC check_salary_raise 11
392
393 DROP PROCEDURE check_salary_raise
394 --
395
396 CREATE PROCEDURE change_address
```

133 %

Messages

Current Salary for employee is : 1000 (RumeysaKumsal)  
Less than 5000

(1 row affected)  
Current Salary is : 1100 (RumeysaKumsal)

Completion time: 2020-12-30T19:20:06.1859567+03:00



## TABLE BEFORE PROCEDURE EXECUTE

EmployeeID	FirstName	LastName	Salary	DateOfBirth	Age	Gender	AddressID	PNumber
1	Ahmet	Çakar	4200	1985-05-14	35	M	10002	(202) 761-3457
2	Mehmet	Kıran	4200	1988-01-23	32	M	10002	(257) 241-7653
3	Veli	Akgül	4200	1975-04-29	45	M	10003	(544) 592-1703
4	Çelik	Erimez	4200	1996-11-16	24	M	10004	(264) 663-9221
5	Erhan	Aydın	4200	1975-05-16	45	M	10005	(466) 715-9098
6	Zafer	Su	4200	1969-05-24	51	M	10006	(580) 998-5614
7	Kadir	Toprak	4200	1985-05-10	35	M	10007	(372) 989-1154
8	Ayşe	Ateş	4200	1991-12-14	29	F	10008	(138) 926-0184
9	Merve	Sönmez	4200	1993-01-14	27	F	10009	(660) 999-8611
10	Zeynep	Altın	4200	1973-12-17	47	F	10010	(798) 117-5647
11	Rumeyza	Kumsal	1100	1976-03-15	44	F	10011	(440) 418-4778
12	Hasan	Yerlikaya	1100	1988-01-25	32	M	10012	(239) 136-2917
13	Muhammet	Anık	1100	1979-04-21	41	M	10013	(117) 570-7561
14	Can	Alevli	1000	1996-11-26	24	M	10014	(414) 183-0507
15	Murat	Yıldız	1000	1978-05-06	42	M	10015	(454) 858-1894
16	Selin	İgik	1000	1988-01-03	32	F	10016	(185) 846-1704
17	Fatma	Soylu	1000	1975-04-29	45	F	10017	(197) 374-0007
18	Burak	Erdoğan	1000	1996-11-01	24	M	10018	(316) 553-9967
19	Kenan	Soflu	1000	1975-05-01	45	M	10019	(842) 653-3432
20	Mustafa	Gökay	1000	1976-11-15	44	M	10020	(525) 670-3840
21	İdil	Kızıl	8500	1988-01-21	32	F	10021	(416) 387-4149
22	Beril	Çay	9000	1975-05-10	45	F	10022	(146) 879-5866
23	Sema	Akdoğan	12000	1969-05-04	51	F	10023	(242) 390-0058
24	Sena	Akın	13000	1985-05-01	35	F	10024	(552) 766-1026
25	Filiz	Alemdar	8700	1976-03-05	44	F	10025	(634) 465-6170
26	Mert	Özgen	7500	1993-09-19	27	M	10026	(832) 567-1803
27	Kor	Kashani	8900	1984-05-23	36	M	10027	(650) 439-1157
28	Yamac	Okur	8600	1981-03-31	39	M	10028	(932) 565-8607
29	Saygi	Asena	7600	1977-06-01	43	M	10029	(851) 309-7763
30	Umut	Dagtekin	9300	1966-10-19	54	M	10030	(564) 631-7889
31	Bartu	Akbay	10500	1988-06-30	32	M	10031	(843) 372-2583
32	Tamaydin	Sancakli	11200	1966-08-23	54	M	10032	(397) 148-9356
33	Emek	Saka	8350	1973-06-06	47	M	10033	(729) 532-6714
34	Yurt	Tiryaki	7650	1988-02-14	32	M	10034	(100) 385-1954
35	Saru	Sevgi	9200	1982-10-24	38	M	10035	(607) 512-2546
36	Erge	Savas	3000	1990-06-13	30	M	10036	(161) 572-9230
37	Sonat	Kurtar	3000	1980-03-10	40	M	10037	(853) 415-3854
38	Kubra	Akcem	3000	1967-05-16	53	F	10038	(844) 281-9524
39	Duygu	Gunay	3000	1993-10-27	27	F	10039	(686) 369-1986
40	Gunduz	Sahin	3000	1976-11-24	44	F	10040	(404) 863-2173
41	Olcay	Usta	3000	1970-10-30	50	F	10041	(600) 876-1513
42	Beren	Sanica	3000	1977-08-12	43	F	10042	(893) 377-3753
43	Icten	Kavur	3000	1995-04-21	25	F	10043	(292) 591-0518
44	Dolunay	Ayvaz	3000	1990-10-11	30	F	10044	(382) 329-5758
45	Yasemin	Gursu	3000	1986-10-13	34	F	10045	(150) 992-1116
46	Goktug	Dereci	4200	1975-04-29	45	M	10046	(618) 290-1157
47	Ayetullah	Cagri	4200	1996-11-01	24	M	10047	(218) 160-2641
48	Aktug	Sanli	4200	1975-05-01	45	M	10048	(155) 728-8669
49	Eylem	Mencik	4200	1976-11-15	44	F	10049	(857) 471-3639
50	Mevlut	Erdem	4200	1988-01-21	32	M	10050	(709) 681-3906
51	Erdener	Sancakli	4200	1975-05-10	45	M	10051	(963) 423-6190
52	Canga	Inal	4200	1969-05-04	51	M	10052	(694) 263-4821
53	Emir	Kashani	4200	1985-05-01	35	M	10053	(522) 940-1241

## TABLE BEFORE PROCEDURE EXECUTE

EmployeeID	FirstName	LastName	Salary	DateOfBirth	Age	Gender	AddressID	PNumber
1	Ahmet	Çakar	4200	1985-05-14	35	M	10002	(202) 761-3457
2	Mehmet	Kıran	4200	1988-01-23	32	M	10002	(257) 241-7653
3	Veli	Akgül	4200	1975-04-29	45	M	10003	(544) 592-1703
4	Çelik	Erimez	4200	1996-11-16	24	M	10004	(264) 663-9221
5	Erhan	Aydın	4200	1975-05-16	45	M	10005	(466) 715-9098
6	Zafer	Su	4200	1969-05-24	51	M	10006	(580) 998-5614
7	Kadir	Toprak	4200	1985-05-10	35	M	10007	(372) 989-1154
8	Ayşe	Ateş	4200	1991-12-14	29	F	10008	(138) 926-0184
9	Merve	Sönmez	4200	1993-01-14	27	F	10009	(660) 999-8611
10	Zeynep	Altın	4200	1973-12-17	47	F	10010	(798) 117-5647
11	Rumeyza	Kumsal	1100	1976-03-15	44	F	10011	(440) 418-4778
12	Hasan	Yerlikaya	1210	1988-01-25	32	M	10012	(239) 136-2917
13	Muhammet	Anık	1100	1979-04-21	41	M	10013	(117) 570-7561
14	Can	Alevli	1000	1996-11-26	24	M	10014	(414) 183-0507
15	Murat	Yıldız	1000	1978-05-06	42	M	10015	(454) 858-1894
16	Selin	İgik	1000	1988-01-03	32	F	10016	(185) 846-1704
17	Fatma	Soylu	1000	1975-04-29	45	F	10017	(197) 374-0007
18	Burak	Erdoğan	1000	1996-11-01	24	M	10018	(316) 553-9967
19	Kenan	Soflu	1000	1975-05-01	45	M	10019	(842) 653-3432
20	Mustafa	Gökay	1000	1976-11-15	44	M	10020	(525) 670-3840
21	İdil	Kızıl	8500	1988-01-21	32	F	10021	(416) 387-4149
22	Beril	Çay	9000	1975-05-10	45	F	10022	(146) 879-5866
23	Sema	Akdoğan	12000	1969-05-04	51	F	10023	(242) 390-0058
24	Sena	Akın	13000	1985-05-01	35	F	10024	(552) 766-1026
25	Filiz	Alemdar	8700	1976-03-05	44	F	10025	(634) 465-6170
26	Mert	Özgen	7500	1993-09-19	27	M	10026	(832) 567-1803
27	Kor	Kashani	8900	1984-05-23	36	M	10027	(650) 439-1157
28	Yamac	Okur	8600	1981-03-31	39	M	10028	(932) 565-8607
29	Saygi	Asena	7600	1977-06-01	43	M	10029	(851) 309-7763
30	Umut	Dagtekin	9300	1966-10-19	54	M	10030	(564) 631-7889
31	Bartu	Akbay	10500	1988-06-30	32	M	10031	(843) 372-2583

**change\_address**, update given persons address to given address id.

```
396 CREATE PROCEDURE change_address
397 (@p_addID int, @p_empID int)
398 AS
399 DECLARE
400     @v_empID int,
401     @v_empCurrentAdd int
402 BEGIN
403     SELECT @v_empID = EmployeeID , @v_empCurrentAdd = e.AddressID
404     FROM Employee e, Addresses a
405     WHERE e.EmployeeID = @p_empID and e.AddressID = @v_empCurrentAdd
406
407     UPDATE Employee SET AddressID = @p_addID WHERE EmployeeID = @p_empID
408 END
409
410 EXEC change_address 10010,1
411 --
412 CREATE PROCEDURE createUnderGoes
413     @PatientID int,
414     @ProcedureID int,
415     @StayID int = NULL ,
416     @Date date = NULL,
417     @DoctorID int,
418     @NurseID int
419 AS
420 BEGIN
```



TABLE BEFORE PROCEDURE EXECUTE

EmployeeID		FirstName	LastName	Salary	DateOfBirth	Age	Gender	AddressID	PNumber
1	Ahmet	Çakar	4200	1985-05-14	35	M	10002	(202) 761-3457	
2	Mehmet	Kıran	4200	1988-01-23	32	M	10002	(257) 241-7653	
3	Veli	Akgül	4200	1975-04-29	45	M	10003	(544) 592-1703	
4	Çelik	Erimez	4200	1996-11-16	24	M	10004	(264) 663-9221	
5	Erhan	Aydın	4200	1975-05-16	45	M	10005	(466) 715-9098	
6	Zafer	Su	4200	1969-05-24	51	M	10006	(580) 998-5614	
7	Kadir	Toprak	4200	1985-05-10	35	M	10007	(372) 989-1154	
8	Ayşe	Ateş	4200	1991-12-14	29	F	10008	(138) 926-0184	
9	Merve	Sönmez	4200	1993-01-14	27	F	10009	(660) 999-8611	
10	Zeynep	Altın	4200	1973-12-17	47	F	10010	(798) 117-5647	
11	Rumeysa	Kumsal	1100	1976-03-15	44	F	10011	(440) 418-4778	
12	Hasan	Yerlikaya	1210	1988-01-25	32	M	10012	(239) 136-2917	
13	Muhammet	Ank	1100	1979-04-21	41	M	10013	(117) 570-7561	
14	Can	Alevli	1000	1996-11-26	24	M	10014	(414) 183-0507	
15	Murat	Yıldız	1000	1978-05-06	42	M	10015	(454) 858-1894	
16	Selin	İşık	1000	1988-01-03	32	F	10016	(185) 846-1704	
17	Fatma	Soylu	1000	1975-04-29	45	F	10017	(197) 374-0007	
18	Burak	Erdoğan	1000	1996-11-01	24	M	10018	(316) 553-9967	
19	Kenan	Soflu	1000	1975-05-01	45	M	10019	(842) 653-3432	
20	Mustafa	Gökay	1000	1976-11-15	44	M	10020	(525) 670-3840	
21	İdil	Kızıl	8500	1988-01-21	32	F	10021	(416) 387-4149	
22	Beril	Çay	9000	1975-05-10	45	F	10022	(146) 879-5866	
23	Sema	Akdoğan	12000	1969-05-04	51	F	10023	(242) 390-0058	
24	Sena	Akın	13000	1985-05-01	35	F	10024	(552) 766-1026	
25	Filiz	Alemdar	8700	1976-03-05	44	F	10025	(634) 465-6170	
26	Mert	Ozgen	7500	1993-09-19	27	M	10026	(832) 567-1803	
27	Kor	Kashani	8900	1984-05-23	36	M	10027	(650) 439-1157	
28	Yamac	Okur	8600	1981-03-31	39	M	10028	(932) 565-8607	
29	Saygi	Asena	7600	1977-06-01	43	M	10029	(851) 309-7763	
30	Umut	Dagtekin	9300	1966-10-19	54	M	10030	(564) 631-7889	

TABLE AFTER PROCEDURE EXECUTE

DESKTOP-P3KLHEO....M - dbo.Employee		DESKTOP-P3KLHEO....dbo.Appointment		DESKTOP-P3KLHEO....M - dbo.Addresses		DESKTOP-P3KLHEO....TEM - d		
EmployeeID	FirstName	LastName	Salary	DateOfBirth	Age	Gender	AddressID	PNumber
1	Ahmet	Çakar	4200	1985-05-14	35	M	10010	(202) 761-3457
2	Mehmet	Kıran	4200	1988-01-23	32	M	10002	(257) 241-7653
3	Veli	Akgül	4200	1975-04-29	45	M	10003	(544) 592-1703
4	Çelik	Erimez	4200	1996-11-16	24	M	10004	(264) 663-9221
5	Erhan	Aydın	4200	1975-05-16	45	M	10005	(466) 715-9098
6	Zafer	Su	4200	1969-05-24	51	M	10006	(580) 998-5614
7	Kadir	Toprak	4200	1985-05-10	35	M	10007	(372) 989-1154
8	Ayşe	Ateş	4200	1991-12-14	29	F	10008	(138) 926-0184
9	Merve	Sönmez	4200	1993-01-14	27	F	10009	(660) 999-8611
10	Zeynep	Altın	4200	1973-12-17	47	F	10010	(798) 117-5647
11	Rumeysa	Kumsal	1100	1976-03-15	44	F	10011	(440) 418-4778
12	Hasan	Yerlikaya	1210	1988-01-25	32	M	10012	(239) 136-2917
13	Muhammet	Ank	1100	1979-04-21	41	M	10013	(117) 570-7561
14	Can	Alevli	1000	1996-11-26	24	M	10014	(414) 183-0507
15	Murat	Yıldız	1000	1978-05-06	42	M	10015	(454) 858-1894
16	Selin	İşık	1000	1988-01-03	32	F	10016	(185) 846-1704
17	Fatma	Soylu	1000	1975-04-29	45	F	10017	(197) 374-0007
18	Burak	Erdoğan	1000	1996-11-01	24	M	10018	(316) 553-9967
19	Kenan	Soflu	1000	1975-05-01	45	M	10019	(842) 653-3432
20	Mustafa	Gökay	1000	1976-11-15	44	M	10020	(525) 670-3840
21	İdil	Kızıl	8500	1988-01-21	32	F	10021	(416) 387-4149
22	Beril	Çay	9000	1975-05-10	45	F	10022	(146) 879-5866
23	Sema	Akdoğan	12000	1969-05-04	51	F	10023	(242) 390-0058
24	Sena	Akın	13000	1985-05-01	35	F	10024	(552) 766-1026
25	Filiz	Alemdar	8700	1976-03-05	44	F	10025	(634) 465-6170
26	Mert	Ozgen	7500	1993-09-19	27	M	10026	(832) 567-1803
27	Kor	Kashani	8900	1984-05-23	36	M	10027	(650) 439-1157
28	Yamac	Okur	8600	1981-03-31	39	M	10028	(932) 565-8607
29	Saygi	Asena	7600	1977-06-01	43	M	10029	(851) 309-7763
30	Umut	Dagtekin	9300	1966-10-19	54	M	10030	(564) 631-7889

**createUnderGoes**, creates and inserts a underGoes into the underGoes table.

```

411  --
412  CREATE PROCEDURE createUnderGoes
413      @PatientID          int,
414      @ProcedureID        int,
415      @StayID             int = NULL ,
416      @Date               date = NULL,
417      @DoctorID           int,
418      @NurseID            int
419  AS
420  BEGIN
421      SET NOCOUNT ON
422
423      INSERT INTO dbo.UnderGoes
424      (
425          PatientID
426          , ProcedureID
427          , StayID
428          , Date
429          , DoctorID
430          , NurseID
431      )
432      VALUES
433      (
434          @PatientID
435          , @ProcedureID
436          , @StayID
437          , @Date
438          , @DoctorID
439          , @NurseID
440      )
441
442  END
443
444  exec createUnderGoes
445      @PatientID = 204 ,
446      @ProcedureID = 703 ,
447      @StayID = NULL,
448      @Date = '2018-02-12',
449      @DoctorID = 27,
450      @NurseID = 5
451
```

## TABLE BEFORE PROCEDURE EXECUTE

OperationID	PatientID	ProcedureID	StayID	Date	DoctorID	NurseID
1	203	703	16	2019-11-05	33	NULL
2	204	702	12	2009-05-30	27	6
3	205	701	1	2019-03-27	28	3
4	206	704	2	2010-06-04	31	4
5	207	706	3	2018-12-13	32	3
6	208	708	4	2017-02-09	33	NULL
7	210	705	13	2019-03-21	28	7
8	212	707	14	2005-06-07	31	4
9	213	710	5	2018-01-11	34	5
10	214	725	6	2017-12-04	22	6
11	215	711	7	2018-08-20	26	7
12	216	712	8	2018-05-05	24	8
13	217	713	9	2014-11-06	35	3
14	218	714	10	2007-11-06	25	4
15	219	715	11	2013-11-06	26	NULL
16	220	716	17	2001-01-01	34	3
17	221	717	18	2014-05-01	21	4
18	222	718	19	2012-09-29	22	5
19	223	719	20	2017-04-23	23	6
20	224	720	21	2012-12-12	24	NULL
21	225	721	25	2011-11-11	28	4
22	226	722	22	2013-11-10	25	2
23	227	723	23	2003-03-12	26	3
24	228	724	24	2019-01-18	27	3
25	225	704	25	2018-03-21	28	4
26	244	704	17	2012-12-27	22	NULL
27	245	704	19	2012-12-27	22	NULL
28	246	704	20	2012-12-27	22	NULL
29	247	704	21	2012-12-27	22	NULL
30	248	704	22	2012-12-27	22	NULL
31	248	704	21	2012-12-27	22	NULL
33	248	704	22	2012-12-27	21	NULL
34	248	704	NULL	2012-12-27	22	NULL
*	NULL	NULL	NULL	NULL	NULL	NULL

## TABLE AFTER PROCEDURE EXECUTE

OperationID	PatientID	ProcedureID	StayID	Date	DoctorID	NurseID
1	203	703	16	2019-11-05	33	NULL
2	204	702	12	2009-05-30	27	6
3	205	701	1	2019-03-27	28	3
4	206	704	2	2010-06-04	31	4
5	207	706	3	2018-12-13	32	3
6	208	708	4	2017-02-09	33	NULL
7	210	705	13	2019-03-21	28	7
8	212	707	14	2005-06-07	31	4
9	213	710	5	2018-01-11	34	5
10	214	725	6	2017-12-04	22	6
11	215	711	7	2018-08-20	26	7
12	216	712	8	2018-05-05	24	8
13	217	713	9	2014-11-06	35	3
14	218	714	10	2007-11-06	25	4
15	219	715	11	2013-11-06	26	NULL
16	220	716	17	2001-01-01	34	3
17	221	717	18	2014-05-01	21	4
18	222	718	19	2012-09-29	22	5
19	223	719	20	2017-04-23	23	6
20	224	720	21	2012-12-12	24	NULL
21	225	721	25	2011-11-11	28	4
22	226	722	22	2013-11-10	25	2
23	227	723	23	2003-03-12	26	3
24	228	724	24	2019-01-18	27	3
25	225	704	25	2018-03-21	28	4
26	244	704	17	2012-12-27	22	NULL
27	245	704	19	2012-12-27	22	NULL
28	246	704	20	2012-12-27	22	NULL
29	247	704	21	2012-12-27	22	NULL
30	248	704	22	2012-12-27	22	NULL
31	248	704	21	2012-12-27	22	NULL
33	248	704	22	2012-12-27	21	NULL
34	248	704	NULL	2012-12-27	22	NULL
38	204	703	NULL	2018-02-12	27	5
NULL	NULL	NULL	NULL	NULL	NULL	NULL

**check\_empty\_room**, after an operation this procedure assigns a patients stay id by checking if that stay id's room is available. If room is available it updates patients stayID and rooms is available columns.

```

450      @NurseID = 5
451
452      -- Find Empty Room After Operation
453      CREATE PROCEDURE check_empty_room
454      (@p_operationID int,@p_stayID int)
455      AS
456      DECLARE
457          @v_stayID int ,
458          @v_roomID int,
459          @v_isAvailable smallint
460      BEGIN
461          SELECT @v_stayID = s.StayID, @v_roomID = r.RoomNumber, @v_isAvailable = r.isAvailable
462          FROM Stay s, Room r, UnderGoes u
463          WHERE s.StayID = @p_stayID and u.OperationID = @p_operationID and s.Room = r.RoomNumber
464
465          IF @v_isAvailable = 1
466          BEGIN
467              PRINT 'Room is Empty! '
468              UPDATE UnderGoes SET StayID = @v_stayID WHERE OperationID = @p_operationID
469              Update Room Set isAvailable = 0 Where roomNumber = @v_roomID
470              PRINT 'Your room is : ' + CAST(@v_roomID AS VARCHAR)
471          END
472          ELSE
473          BEGIN
474              PRINT 'Room is being used by another patient. Please try another stayID. '
475          END
476      END
477
478      EXEC check_empty_room 38,10
479
480      Drop procedure check_empty_room
481
482      --Trigger
483      --Calculate Age After each insertion of Employee?
484      Create Trigger tr_UpdateAge
485      On Employee
486      After Insert
487      As
488      Begin

```

133 %

Messages

Room is Empty!

(1 row affected)

(1 row affected)

Your room is : 1010

Completion time: 2020-12-30T19:48:00.1264878+03:00

## TABLE BEFORE PROCEDURE EXECUTE

DESKTOP-P3KLHEO...YSTEM - dbo.Room		DESKTOP-P3KLHEO...SYSTEM - dbo.Stay		DESKTOP-P3KLHEO...- dbo.UnderGoes		DESKTOP-P3KLHEO...M-	
	OperationID	PatientID	ProcedureID	StayID	Date	DoctorID	NurselD
10.5 - DESK	1	203	703	16	2019-11-05	33	NULL
	2	204	702	12	2009-05-30	27	6
					2019-03-27	28	3
	4	206	704	2	2010-06-04	31	4
	5	207	706	3	2018-12-13	32	3
	6	208	708	4	2017-02-09	33	NULL
	7	210	705	13	2019-03-21	28	7
	8	212	707	14	2005-06-07	31	4
	9	213	710	5	2018-01-11	34	5
	10	214	725	6	2017-12-04	22	6
	11	215	711	7	2018-08-20	26	7
	12	216	712	8	2018-05-05	24	8
	13	217	713	9	2014-11-06	35	3
	14	218	714	10	2007-11-06	25	4
	15	219	715	11	2013-11-06	26	NULL
	16	220	716	17	2001-01-01	34	3
	17	221	717	18	2014-05-01	21	4
	18	222	718	19	2012-09-29	22	5
	19	223	719	20	2017-04-23	23	6
	20	224	720	21	2012-12-12	24	NULL
	21	225	721	25	2011-11-11	28	4
	22	226	722	22	2013-11-10	25	2
	23	227	723	23	2003-03-12	26	3
	24	228	724	24	2019-01-18	27	3
	25	225	704	25	2018-03-21	28	4
	26	244	704	17	2012-12-27	22	NULL
	27	245	704	19	2012-12-27	22	NULL
	28	246	704	20	2012-12-27	22	NULL
	29	247	704	21	2012-12-27	22	NULL
	30	248	704	22	2012-12-27	22	NULL
	31	248	704	21	2012-12-27	22	NULL
	33	248	704	22	2012-12-27	21	NULL
	34	248	704	NULL	2012-12-27	22	NULL
	38	204	703	NULL	2018-02-12	27	5
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

DESKTOP-P3KLHEO...YSTEM - dbo.Room		DESKTOP-P3KLHEO...SYSTEM - dbo.Stay		DESKTOP-P3KLHEO...M-	
	RoomNumber	Type	FloorNumber	isAvailable	
DESK	1001	A	3	1	
	1002	A	3	0	
	1003	A	3	1	
	1004	A	3	1	
	1005	A	3	0	
	1006	A	3	0	
	1007	A	3	1	
	1008	A	3	0	
	1009	A	3	1	
	1010	A	3	1	
	1011	B	4	0	
	1012	B	4	1	
	1013	B	4	1	
	1014	B	4	0	
	1015	B	4	0	
	1016	B	4	1	
	1017	B	4	0	
	1018	B	4	1	
	1019	C	5	0	
	1020	C	5	1	
	1021	C	5	0	
	1022	C	5	1	
	1023	C	5	0	
	1024	C	5	1	
	1025	C	5	0	
*	NULL	NULL	NULL	NULL	

## TABLE AFTER PROCEDURE EXECUTE

DESKTOP-P3KLHEO...YSTEM - dbo.Room		DESKTOP-P3KLHEO...SYSTEM - dbo.Stay		DESKTOP-P3KLHEO...- dbo.UnderGoes		DESKTOP-P3KLHEO...M -	
OperationID	PatientID	ProcedureID	StayID	Date	DoctorID	NurseID	
1	203	703	16	2019-11-05	33	NULL	
2	204	702	12	2009-05-30	27	6	
3	205	701	1	2019-03-27	28	3	
4	206	704	2	2010-06-04	31	4	
5	207	706	3	2018-12-13	32	3	
6	208	708	4	2017-02-09	33	NULL	
7	210	705	13	2019-03-21	28	7	
8	212	707	14	2005-06-07	31	4	
9	213	710	5	2018-01-11	34	5	
10	214	725	6	2017-12-04	22	6	
11	215	711	7	2018-08-20	26	7	
12	216	712	8	2018-05-05	24	8	
13	217	713	9	2014-11-06	35	3	
14	218	714	10	2007-11-06	25	4	
15	219	715	11	2013-11-06	26	NULL	
16	220	716	17	2001-01-01	34	3	
17	221	717	18	2014-05-01	21	4	
18	222	718	19	2012-09-29	22	5	
19	223	719	20	2017-04-23	23	6	
20	224	720	21	2012-12-12	24	NULL	
21	225	721	25	2011-11-11	28	4	
22	226	722	22	2013-11-10	25	2	
23	227	723	23	2003-03-12	26	3	
24	228	724	24	2019-01-18	27	3	
25	225	704	25	2018-03-21	28	4	
26	244	704	17	2012-12-27	22	NULL	
27	245	704	19	2012-12-27	22	NULL	
28	246	704	20	2012-12-27	22	NULL	
29	247	704	21	2012-12-27	22	NULL	
30	248	704	22	2012-12-27	22	NULL	
31	248	704	21	2012-12-27	22	NULL	
33	248	704	22	2012-12-27	21	NULL	
34	248	704	NULL	2012-12-27	22	NULL	
38	204	703	10	2018-02-12	27	5	
»	NULL	NULL	NULL	NULL	NULL	NULL	

DESKTOP-P3KLHEO...YSTEM - dbo.Room		DESKTOP-P3KLHEO...SYSTEM - dbo.Stay		DESKT
RoomNumber	Type	FloorNumber	isAvailable	
1001	A	3	1	
1002	A	3	0	
1003	A	3	1	
1004	A	3	1	
1005	A	3	0	
1006	A	3	0	
1007	A	3	1	
1008	A	3	0	
1009	A	3	1	
1010	A	3	0	
1011	B	4	0	
1012	B	4	1	
1013	B	4	1	
1014	B	4	0	
1015	B	4	0	
1016	B	4	1	
1017	B	4	0	
1018	B	4	1	
1019	C	5	0	
1020	C	5	1	
1021	C	5	0	
1022	C	5	1	
1023	C	5	0	
1024	C	5	1	
1025	C	5	0	
*	NULL	NULL	NULL	NULL