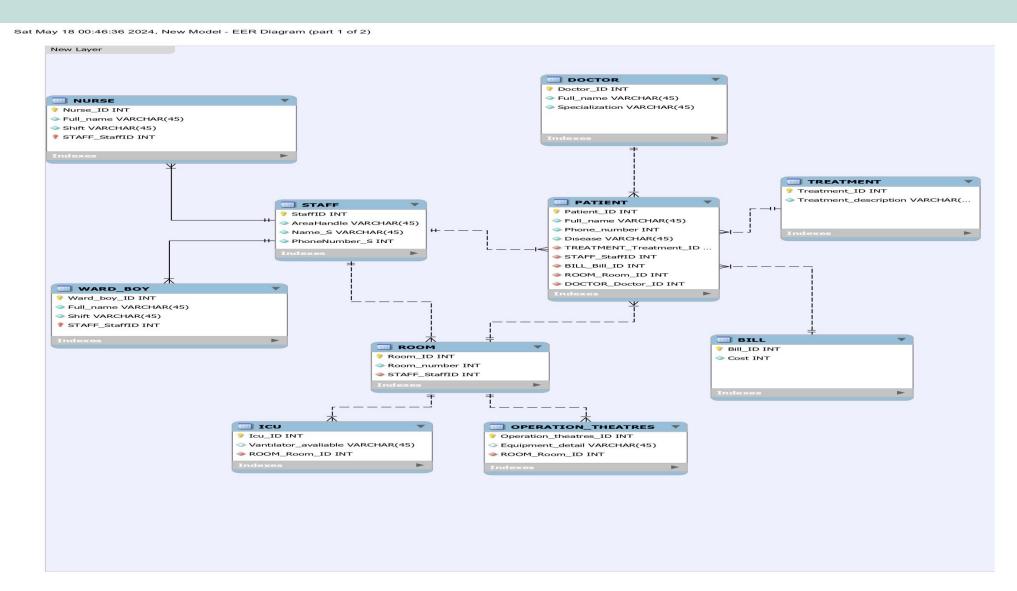
Entity and Attributes

Entity-1	Entity-2	Entity-3	Entity-4	Entity-5	Entity-6	Entity-7	Entity-8	Entity-9	Entity-10
PATİENT <u></u>	STAFF <u></u>	NURSE	DOCTOR <u></u>	WARDBOY <mark></mark> ✓	ROOM	ICU <u>~</u>	OPERATIN THEATER	BILL ~	TREATMENT
#PatientID	#StaffID	#NurseID	#DoctorID	#Wardboy	#RoomID	#lcuID	#OTID	#BillID	#TretmentID
*FirstName	*FirstName	*Shift	*Specialty	*DutyArea	*RoomNumber	*IcuFacilities	*OTFacilities	*TotalAmount	mentDescription
*LastName	*LastName				*RoomType				*StartDate
*PhoneNumber	*PhoneNumber				*AvailabilityStatus				*EndDate
*Address									
*DateOfBırth									
*Disease									
*AdmissionDate									

Matrix Diagram

	PATIENT	DOCTOR(STAFF)	TREATMENT	BILL	STAFF	NURSE(STAFF)	WARDBOY(STAFF)	ROOM	ICU(ROOM)	OPERATIONTHEATER(ROOM
PATIENT			receive	pay	care by			assign		
DOCTOR			apply							
TREATMENT	received by	applied by								
BILL	paid by									
STAFF	care	include				include	include	maintain		
NURSE					belongs to					
WARDBOY					belongs to					
ROOM	assigned by				maintained by				has	has
ICU(ROOM)								belongs to		
OPERATIONTHEATER(ROOM								belongs to		





Scenario:

A patient will have a unique Patient ID. Full description about the patient about personal detail and phone number, and then Disease and what treatment is going on. The doctor will handle patients, one doctor can Treat more than 1 patient. Also, each doctor will have a unique ID. Doctor and Patients will be related. Patients can be admitted to the hospital. So different room numbers will be there, also rooms for Operation Theaters and ICU. There are some nurses, and ward boys for the maintenance of the hospital and for patient take care. Based upon the number of days and treatment bill will be generated.

Tables: Patients, Doctors, Treatments, Rooms, OperationTheaters, ICUs, Nurses, WardBoys, Bills.



SQL DDL CODES

<<CREAT>> And <<INSERT>>



STAFF

- CREATE TABLE Staff (
- StaffID NUMBER PRIMARY KEY,
- FirstName VARCHAR2(50) NOT NULL,
- LastName VARCHAR2(50) NOT NULL,
- PhoneNumber VARCHAR2(15) NOT NULL);



- INSERT INTO Staff (StaffID, FirstName, LastName, PhoneNumber)
- VALUES (101, 'Ebu', 'Bekir', '555-2131');
- INSERT INTO Staff (StaffID, FirstName, LastName, PhoneNumber)
- VALUES(201, 'Bedirhan', 'Çelik', '555-8765');
- INSERT INTO Staff (StaffID, FirstName, LastName, PhoneNumber)
- VALUES(301, 'Burak', 'Yılmaz', '555-9999');
- INSERT INTO Staff (StaffID, FirstName, LastName, PhoneNumber)
- VALUES (401, 'Erdem', 'Çoban', '555-3131');
- INSERT INTO Staff (StaffID, FirstName, LastName, PhoneNumber)
- VALUES(501, 'Ahmet', 'Kan', '555-8564');
- INSERT INTO Staff (StaffID, FirstName, LastName, PhoneNumber)
- VALUES(601, 'Mehmet', 'Topal', '555-7834');



INSERT INTO Staff (StaffID, FirstName, LastName, PhoneNumber) VALUES(701, 'Cagatay', 'Erdogan', '555-7652'); INSERT INTO Staff (StaffID, FirstName, LastName, PhoneNumber) VALUES (801, 'Cemal', 'Keçeci', '555-0963'); INSERT INTO Staff (StaffID, FirstName, LastName, PhoneNumber) VALUES (901,'Abidin','Genç','555-9632'); INSERT INTO Staff (StaffID, FirstName, LastName, PhoneNumber) VALUES (1001, 'Serdar', 'Bal', '555-8521'); INSERT INTO Staff (StaffID, FirstName, LastName, PhoneNumber) VALUES (1101, 'Yagiz', 'Yumuşak', '555-7412'); INSERT INTO Staff (StaffID, FirstName, LastName, PhoneNumber) VALUES (1201, 'Poyraz', 'Sert', '555-8523');

Column Name	Data Type	Nullable	Default	Primary Key
STAFFID	NUMBER	No		1
FIRSTNAME	VARCHAR2(50)	No		
LASTNAME	VARCHAR2(50)	No		
PHONENUMBER	VARCHAR2(15)	No		

	STAFF + V									
Query Count Rows Insert Row Load Data										
EDIT	STAFFID	FIRSTNAME	LASTNAME	PHONENUMBER						
C	401	Erdem	Çoban	555-3131						
ď	501	Ahmet	Kan	555-8564						
ď	601	Mehmet	Topal	555-7834						
ď	101	Ebu	Bekir	555-9999						
ď	201	Bedirhan	Çelik	555-8765						
C	701	Cagatay	Erdogan	555-7652						
C	801	Cemal	Keçeci	555-0963						
C	901	Abidin	Genç	555-9632						
C	301	Burak	Yılmaz	555-9999						
C	1001	Serdar	Bal	555-8521						
C	1101	Yagiz	Yumuşak	555-7412 Windows'u Etkinleştir						
C	1201	Poyraz	Sert	W\$\$\$\frac{1}{2}\text{8}\text{3}\text{2}\text{3}\text{4}\text{1}\text{1}\text{2}\text{2}\text{1}\text{1}\text{2}\text{2}\text{3}\text{4}\text{2}\text{3}\text{4}\text{2}\text{4}\text{2}\text{4}\text{2}\text{4}\text{2}\text{4}\text{2}\text{4}\text{2}\text{4}\text{2}\text{4}\text{2}\text{4}\text{2}\text{4}\text{2}\text{4}\text{2}\text{4}\text{2}\text{4}\text{2}\text{4}\text{2}\text{4}\text{4}\text{2}\text{4}\text{2}\text{4}\text{4}\text{2}\text{4}\text{2}\text{4}\text{4}\text{2}\text{4}\text{4}\text{4}\text{4}\text{2}\text{4}4						
				from to a con-						

NURSE

- CREATE TABLE Nurse (
- NurseID NUMBER PRIMARY KEY,
- Shift VARCHAR2(20) NOT NULL,
- CONSTRAINT fk_nurse_staff FOREIGN KEY (NurseID)
 REFERENCES Staff(StaffID)



- INSERT INTO Nurse (NurseID, Shift)
- VALUES (101, 'Day Shift');
- INSERT INTO Nurse (NurseID, Shift)
- VALUES (201, 'Evening Shift');
- INSERT INTO Nurse (NurseID, Shift)
- VALUES (301, 'Evening Shift');
- INSERT INTO Nurse (NurseID, Shift)
- VALUES (401, 'Day Shift');



Column Name	Data Type	Nullable	Default	Primary Key
NURSEID	NUMBER	No		1
JOBROTATION	VARCHAR2(20)	No		

EDIT	NURSEID	JOBROTATION
C	301	Evening Shift
C	401	Day Shift
C	101	Day Shift
ď	201	Evening Shift



WARDBOY

- CREATE TABLE WardBoy (
- WardBoyID NUMBER PRIMARY KEY,
- DutyArea VARCHAR2(100) NOT NULL,
- CONSTRAINT fk_wardboy_staff FOREIGN KEY (WardBoyID) REFERENCES Staff(StaffID)
-);



- INSERT INTO WardBoy (WardBoyID, DutyArea)
- VALUES (501, 'West Wing');
- INSERT INTO WardBoy (WardBoyID, DutyArea)
- VALUES (601, 'North Wing');
- INSERT INTO WardBoy (WardBoyID, DutyArea)
- VALUES (701, 'East Wing');
- INSERT INTO WardBoy (WardBoyID, DutyArea)
- VALUES (801, 'South Wing');



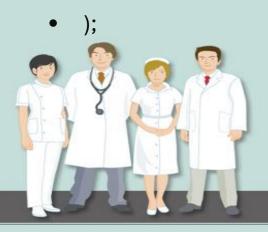
Column Name	Data Type	Nullable	Default	Primary Key
WARDBOYID	NUMBER	No		1
DUTYAREA	VARCHAR2(100)	No		

EDIT	WARDBOYID	DUTYAREA
C	501	West Wing
C	801	South Wing
C	701	East Wing
R	601	North Wing



ROOMS

- CREATE TABLE Rooms (
- RoomID NUMBER PRIMARY KEY,
- RoomNumber NUMBER NOT NULL,
- RoomType VARCHAR2(50) NOT NULL,
- AvailabilityStatus VARCHAR2(20) NOT NULL,
- StaffID NUMBER NOT NULL,
- CONSTRAINT fk_staff_room FOREIGN KEY (StaffID) REFERENCES Staff(StaffID)



- INSERT INTO Rooms (RoomID, RoomNumber, RoomType, AvailabilityStatus, StaffID)
- VALUES (1, 100, '2-bed', 'Available', 101);
- INSERT INTO Rooms (RoomID, RoomNumber, RoomType, AvailabilityStatus, StaffID)
- VALUES (2, 200, '4-bed', 'Available', 201);
- INSERT INTO Rooms (RoomID, RoomNumber, RoomType, AvailabilityStatus, StaffID)
- VALUES (3, 300, '2-bed', 'Available', 301);
- INSERT INTO Rooms (RoomID, RoomNumber, RoomType, AvailabilityStatus, StaffID)
- VALUES (4, 400, '3-bed', 'Available', 401);
- INSERT INTO Rooms (RoomID, RoomNumber, RoomType, AvailabilityStatus, StaffID)
- VALUES (5, 500, '2-bed', 'Available', 501);

INSERT INTO Rooms (RoomID, RoomNumber, RoomType, AvailabilityStatus, StaffID)

VALUES (6, 600, '6-bed', 'Available', 601);

INSERT INTO Rooms (RoomID, RoomNumber, RoomType, AvailabilityStatus, StaffID)

VALUES (7, 700, '1-bed', 'Available', 701);

INSERT INTO Rooms (RoomID, RoomNumber, RoomType, AvailabilityStatus, StaffID)

VALUES (8, 800, '2-bed', 'Available', 801);

INSERT INTO Rooms (RoomID, RoomNumber, RoomType, AvailabilityStatus, StaffID)

VALUES (9, 900, '4-bed', 'Available', 901);

INSERT INTO Rooms (RoomID, RoomNumber, RoomType, AvailabilityStatus, StaffID)

VALUES (10, 1000, '2-bed', 'Available', 1001);

INSERT INTO Rooms (RoomID, RoomNumber, RoomType, AvailabilityStatus, StaffID)

VALUES (11, 1100, '1-bed', 'Available', 1101);

INSERT INTO Rooms (RoomID, RoomNumber, RoomType, AvailabilityStatus, StaffID)

VALUES (12, 1200, '3-bed', 'Available', 1201);



Column Name	Column Name		Data Type		Nullable		Default	Primary Key
ROOMID	ROOMID NUMBER			No			1	
ROOMNUMBER			NUMBER		No			
ROOMTYPE			VARCHAR2(50)		No			
AVAILABILITYSTATU	JS		VARCHAR2(20)		No			
STAFFID	STAFFID NUMBER			No				
EDIT	ROOMID		ROOMNUMBER	ROOM	МТҮРЕ		AVAILABILITYSTATUS	STAFFID
ď	5	500		2-bed		Available		501
ď	6	600		6-bed		Available		601
ď	8	800		2-bed		Available		801
ď	1	100		2-bed		Available		101
ď	2	200		4-bed		Available		201
C	4	400		3-bed		Available		401
ď	10	1000		2-bed		Available		1001
C	12	1200		3-bed		Available		1201
C	3	300		2-bed		Available		301

Available

Available

Available

1-bed

1-bed

4-bed

1100

700

900

1101

701

901

ICU

```
CREATE TABLE ICU (
ICU_ID NUMBER PRIMARY KEY,
ICUFacilities VARCHAR2(200) NOT NULL,
CONSTRAINT fk_icu_room FOREIGN KEY (ICU_ID) REFERENCES Rooms(RoomID)
);
```



INSERT INTO ICU (ICU_ID, ICUFacilities)

VALUES (1, 'Advanced monitoring equipment');

INSERT INTO ICU (ICU_ID, ICUFacilities)

VALUES (2, 'Advanced monitoring equipment');

INSERT INTO ICU (ICU_ID, ICUFacilities)

VALUES (3, 'Advanced monitoring equipment');

INSERT INTO ICU (ICU_ID, ICUFacilities)

VALUES (4, 'Advanced monitoring equipment');

INSERT INTO ICU (ICU_ID, ICUFacilities)

VALUES (11, 'Advanced monitoring equipment');

INSERT INTO ICU (ICU_ID, ICUFacilities)

VALUES (12, 'Advanced monitoring equipment');

Column Name	Data Type	Nullable	Default	Primary Key
ICU_ID	NUMBER	No		1
ICUFACILITIES	VARCHAR2(100)	No		

EDIT	ICU_ID	ICUFACILITIES
ď	1	Advanced monitoring equipment
ď	2	Advanced monitoring equipment
ď	4	Advanced monitoring equipment
ď	12	Advanced monitoring equipment
ď	3	Advanced monitoring equipment
R	11	Advanced monitoring equipment



OPERATION THEATER

```
CREATE TABLE OperationTheater (
OperationTheaterID NUMBER PRIMARY KEY,
OTFacilities VARCHAR2(200) NOT NULL,
CONSTRAINT fk_ot_room FOREIGN KEY (OperationTheaterID) REFERENCES Rooms(RoomID)
);
```



INSERT INTO OperationTheater (OperationTheaterID, OTFacilities)

VALUES (5, 'Surgical equipment');

INSERT INTO OperationTheater (OperationTheaterID, OTFacilities)

VALUES (6, 'Surgical equipment');

INSERT INTO OperationTheater (OperationTheaterID, OTFacilities)

VALUES (7, 'Surgical equipment');

INSERT INTO OperationTheater (OperationTheaterID, OTFacilities)

VALUES (8, 'Surgical equipment');

INSERT INTO OperationTheater (OperationTheaterID, OTFacilities)

VALUES (9, 'Surgical equipment');

INSERT INTO OperationTheater (OperationTheaterID, OTFacilities)

VALUES (10, 'Surgical equipment');

Column Name	Data Type	Nullable	Default	Primary Key
OPERATIONTHEATERID	NUMBER	No		1
OTFACILITIES	VARCHAR2(200)	No	-	-

EDIT	OPERATIONTHEATERID	OTFACILITIES
ď	5	Surgical equipment
C	9	Surgical equipment
ď	10	Surgical equipment
C	7	Surgical equipment
C	8	Surgical equipment
C	6	Surgical equipment



DOCTOR

```
CREATE TABLE Doctor (
DoctorID NUMBER PRIMARY KEY,
Specialty VARCHAR2(50) NOT NULL,
CONSTRAINT fk_doctor_staff FOREIGN KEY (DoctorID) REFERENCES Staff(StaffID)
);
```



INSERT INTO Doctor (DoctorID, Specialty)

VALUES (901, 'Urology');

INSERT INTO Doctor (DoctorID, Specialty)

VALUES (1001, 'Anesthesiology');

INSERT INTO Doctor (DoctorID, Specialty)

VALUES (1101, 'Cardiology');

INSERT INTO Doctor (DoctorID, Specialty)

VALUES (1201, 'Family Medicine');



Column Name	Data Type	Nullable	Default	Primary Key
DOCTORID	NUMBER	No		1
SPECIALTY	VARCHAR2(50)	No	-	-

EDIT	DOCTORID	SPECIALTY
C	1101	Cardiology
ď	901	Urology
ď	1001	Anesthesiology
C	1201	Family Medicine



PATIENT

CREATE TABLE Patient (

PatientID NUMBER PRIMARY KEY,

FirstName VARCHAR2(50) NOT NULL,

LastName VARCHAR2(50) NOT NULL,

PhoneNumber VARCHAR2(15) NOT NULL,

Address VARCHAR2(100) NOT NULL,

DateOfBirth DATE NOT NULL,

Disease VARCHAR2(100) NOT NULL,

AdmissionDate DATE NOT NULL,

RoomID NUMBER,

NurseID NUMBER,

WardBoyID NUMBER,

DoctorID NUMBER,

CONSTRAINT fk_room FOREIGN KEY (RoomID) REFERENCES Rooms(RoomID),

CONSTRAINT fk_nurse FOREIGN KEY (NurseID) REFERENCES Staff(StaffID),

CONSTRAINT fk_wardboy FOREIGN KEY (WardBoyID) REFERENCES Staff(StaffID),

CONSTRAINT fk_doctor_patient FOREIGN KEY (DoctorID) REFERENCES Doctor(DoctorID)

INSERT INTO Patient (PatientID, FirstName, LastName, PhoneNumber, Address, DateOfBirth, Disease, AdmissionDate, RoomID, NurseID, WardBoyID, DoctorID)

VALUES (111, 'Ömer', 'Güler', '555-1234', 'Kadıköy', TO_DATE('1991-01-15', 'YYYY-MM-DD'), 'Flu', TO_DATE('2024-05-01', 'YYYY-MM-DD'), 1, 101, 501, 901);

INSERT INTO Patient (PatientID, FirstName, LastName, PhoneNumber, Address, DateOfBirth, Disease, AdmissionDate, RoomID, NurseID, WardBoyID, DoctorID)

VALUES (222, 'Emre', 'Colak', '555-5236', 'Pendik', TO_DATE('1992-02-15', 'YYYY-MM-DD'), 'Stomachache', TO_DATE('2024-05-02', 'YYYY-MM-DD'), 2, 201, 601, 1001);

INSERT INTO Patient (PatientID, FirstName, LastName, PhoneNumber, Address, DateOfBirth, Disease, AdmissionDate, RoomID, NurseID, WardBoyID, DoctorID)

VALUES (333, 'Fatih', 'Terim', '555-8675', 'Kartal', TO_DATE('1993-06-15', 'YYYY-MM-DD'), 'Mad', TO_DATE('2024-05-03', 'YYYY-MM-DD'), 3, 301, 701, 1101);

INSERT INTO Patient (PatientID, FirstName, LastName, PhoneNumber, Address, DateOfBirth, Disease, AdmissionDate, PoomID, NurseID, WardBoyID, DoctorID)

VALUES (444, 'Sema', 'Oner', '555-6458', 'Karaköy', TO_DATE('1994-05-15', 'YYYY-MM-DD'), 'Fever', TO_DATE('2024-05-04', 'YYYY-MM-DD'), 4, 401, 801, 1201);

Column Name		Data Type		Null	Nullable		Default			Primary Key				
PATIENT	TID			NUMBER		No						1		
FIRSTNAME				VARCHAR2(50)			No					-		
LASTNAME			VARCHAR2(50)			No								
PHONENUMBER				VARCHAR2(15)			No					-		
ADDRES	SS			VARCHAR2(100)		No	No					-		
DATEOF	BIRTH			DATE		No	No					-		
DISEASE	=			VARCHAR2(100)		No	No -					-		
ADMISS	SIONDATE			DATE		No	No					-		
ROOMID				NUMBER			Yes -						-	
NURSEID				NUMBER		Yes	Yes -					-		
WARDB	OYID			NUMBER		Yes	Yes -					-		
DOCTORID			NUMBER		Yes	Yes		Windows		ıs'ıı Ftkinl	II Ftkinlectir			
EDIT	PATIENTID	FIRSTNAME	LASTNAMI	ME PHONENUMBER	R ADDRESS	DATEOFBIRTH	DISEASE	ADM	ISSIONDATE	ROOMID	NURSEID	WARDBOYID	DOCTORID	
ď	222	Emre	Colak	555-5236	Pendik	15-Feb-1992	Stomachache	02-Ma	ay-2024	2	201	601	1001	
ď	333	Fatih	Terim	555-8675	Kartal	15-Jun-1993	Mad	03-Ma	ay-2024	3	301	701	1101	
ď	444	Sema	Oner	555-6458	Karaköy	15-May-1994	Fever	04-Ma	ay-2024	4	401	801	1201	
ď	111	Ömer	Güler	555-1234	Kadıköy	15-Jan-1991	Flu	01-Ma	ay-2024	1	101	501	901	

TREATMENT

CREATE TABLE Treatment (

TreatmentID NUMBER PRIMARY KEY,

TreatmentDescription VARCHAR2(200) NOT NULL,

PatientID NUMBER,

DoctorID NUMBER,

StartDate DATE NOT NULL,

EndDate DATE NOT NULL,

CONSTRAINT fk_patient FOREIGN KEY (PatientID) REFERENCES Patient(PatientID),

CONSTRAINT fk_doctor FOREIGN KEY (DoctorID) REFERENCES Doctor(DoctorID)



INSERT INTO Treatment (TreatmentID, TreatmentDescription, PatientID, DoctorID, StartDate, EndDate)

VALUES (1000, 'Prescribed antibiotics', 111, 901, TO_DATE('2024-05-01', 'YYYY-MM-DD'), TO_DATE('2024-05-05', 'YYYY-MM-DD'));

INSERT INTO Treatment (TreatmentID, TreatmentDescription, PatientID, DoctorID, StartDate, EndDate)

VALUES (2000, 'Cancer', 222, 1001, TO_DATE('2024-06-01', 'YYYY-MM-DD'), TO_DATE('2024-06-05', 'YYYY-MM-DD'));

INSERT INTO Treatment (TreatmentID, TreatmentDescription, PatientID, DoctorID, StartDate, EndDate)

VALUES (3000, 'Malaria prophylactic', 333, 1101, TO_DATE('2024-07-01', 'YYYY-MM-DD'), TO_DATE('2024-07-05', 'YYYY-MM-DD'));

INSERT INTO Treatment (TreatmentID, TreatmentDescription, PatientID, DoctorID, StartDate, EndDate)

VALUES (4000, 'Covid-19', 444, 1201, TO_DATE('2024-08-01', 'YYYY-MM-DD'), TO_DATE('2024-08-05', 'YYYY-MM-DD'));



Column Name	Data Type	Nullable	Default	Primary Key
TREATMENTID	NUMBER	No		1
TREATMENTDESCRIPTION	VARCHAR2(200)	No		
PATIENTID	NUMBER	Yes		
DOCTORID	NUMBER	Yes		
STARTDATE	DATE	No		
ENDDATE	DATE	No		

EDIT	TREATMENTID	TREATMENTDESCRIPTION	PATIENTID	DOCTORID	STARTDATE	ENDDATE
ď	4000	Covid-19	444	1201	01-Aug-2024	05-Aug-2024
ď	3000	Malaria prophylactic	333	1101	01-Jul-2024	05-Jul-2024
ď	1000	Prescribed antibiotics	111	901	01-May-2024	05-May-2024
Γ/2°	2000	Cancer	222	1001	01_ lun_2024	05_1un_2024



BILL

```
CREATE TABLE Bill (
BillID NUMBER PRIMARY KEY,

PatientID NUMBER,

TotalAmount NUMBER NOT NULL,

CONSTRAINT fk_patient_bill FOREIGN KEY (PatientID) REFERENCES Patient(PatientID)
```



INSERT INTO Bill (BillID, PatientID, TotalAmount)

VALUES (1111, 111, 500.00);

INSERT INTO Bill (BillID, PatientID, TotalAmount)

VALUES (2222, 222, 600.00);

INSERT INTO Bill (BillID, PatientID, TotalAmount)

VALUES (3333, 333, 700.00);

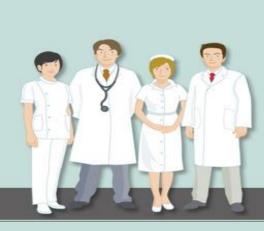
INSERT INTO Bill (BillID, PatientID, TotalAmount)

VALUES (4444, 444, 800.00);



Column Name	Data Type	Nullable	Default	Primary Key
BILLID	NUMBER	No		1
PATIENTID	NUMBER	Yes		
TOTALAMOUNT	NUMBER	No		

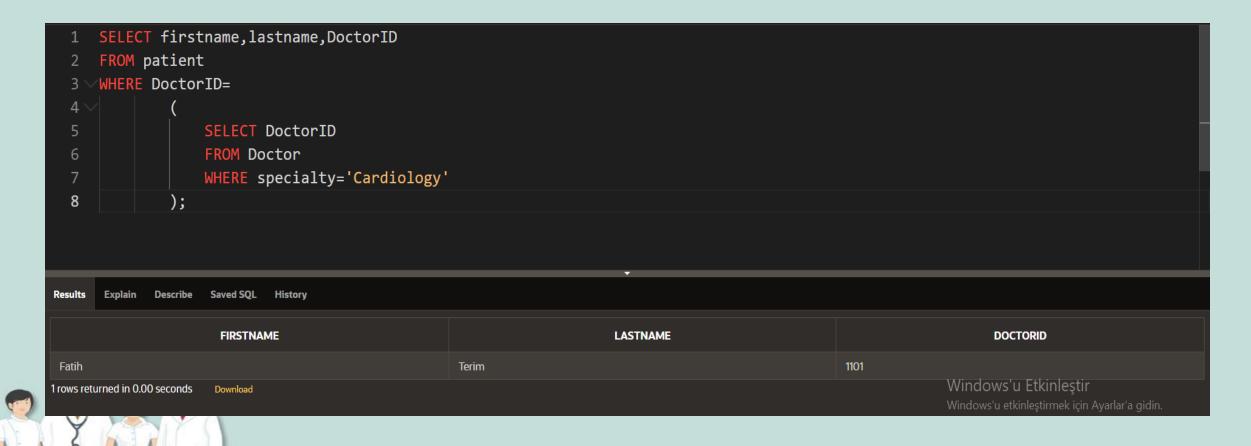
EDIT	BILLID	PATIENTID	TOTALAMOUNT
ď	3333	333	700
ď	4444	444	800
ď	1111	111	500
[O ₁	2222	222	600



SQL DML CODES



SUBQUERY



GROUP BY FUNCTION

```
SELECT StaffID, COUNT(*) AS StaffCount
FROM Staff
GROUP BY StaffID;
```

Res	ults Explain Describe Saved	SQL History	•	
		STAFFID		STAFFCOUNT
10	1		1	
20	1		1	
30	1		1	
40	1		1	
50	1		1	
60	1		1	
70	1		1	
80	1		1	Windows'y Ethinlastic
90	1		1	Windows'u Etkinleştir Windows'u etkinleştirmek için Ayarlar'a gidin.
<u>Q</u> tr	_a805_sql_s62	e n	Copyright © 1999, 2022, Oracle and/or its affiliates.	Oracle APEX 22.2.1

DATE FUNCTION

```
2 SELECT AVG(EndDate - StartDate) AS AvgTreatmentDuration
      FROM Treatment
      WHERE TreatmentDescription='Cancer';
      Explain Describe Saved SQL History
                                                         AVGTREATMENTDURATION
1 rows returned in 0.00 seconds
                    Download
```



CHARACTER FUNCTION

```
SELECT PatientID, FirstName, SUBSTR(FirstName, 1, 2) AS FirstInitial
      FROM Patient;
       Explain Describe Saved SQL History
                   PATIENTID
                                                                   FIRSTNAME
                                                                                                                        FIRSTINITIAL
222
                                                                                                  Em
                                               Emre
333
                                               Fatih
                                                                                                   Fa
444
                                               Sema
                                                                                                  Se
                                               Ömer
                                                                                                  Öm
4 rows returned in 0.00 seconds
```

Windows'u Etkinlestir

GROUP BY 2

```
1 SELECT PatientID, Address, LENGTH(Address) AS AddressLength
       FROM Patient;
       Explain Describe Saved SQL History
Results
                  PATIENTID
                                                              ADDRESS
                                                                                                                 ADDRESSLENGTH
222
                                              Pendik
                                                                                       6
333
                                              Kartal
                                                                                       6
 444
                                              Karaköy
111
                                              Kadıköy
                                                                                       7
4 rows returned in 0.01 seconds
```

UPDATE FUNCTION

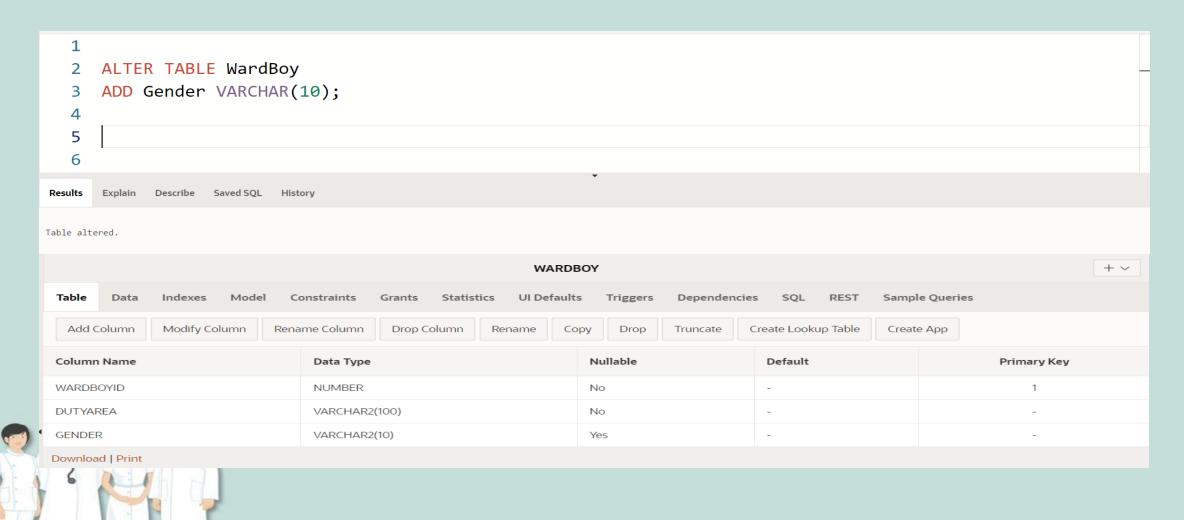
```
1
2 UPDATE Staff
3 SET PhoneNumber = '555-9999'
4 WHERE StaffID = 101;
5
6

Results Explain Describe Saved SQL History

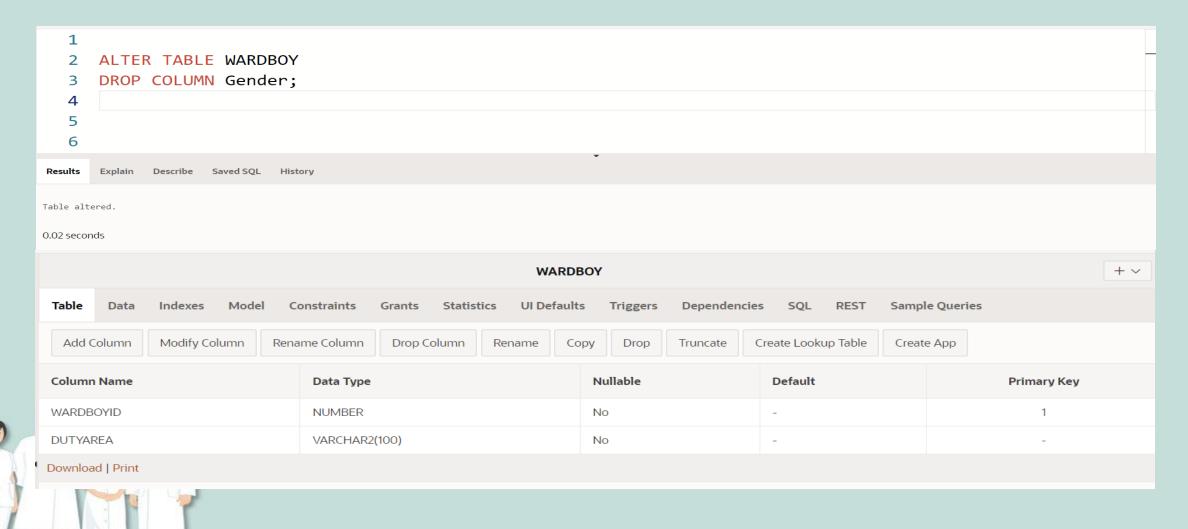
1 row(s) updated.
0.00 seconds
```

STAFF + ~				
EDIT	STAFFID	FIRSTNAME	LASTNAME	PHONENUMBER
Ø.	401	Erdem	Çoban	555-3131
C	501	Ahmet	Kan	555-8564
C	601	Mehmet	Topal	555-7834
	101	Ebu	Bekir	555-9999
Z	201	Bedirhan	Çelik	555-8765
2	701	Cagatay	Erdogan	555-7652
2	801	Cemal	Keçeci	555-0963
Ø.	901	Abidin	Genç	555-9632
2	301	Burak	Yılmaz	555-9999
Ø	1001	Serdar	Bal	555-8521
C	1101	Yagiz	Yumuşak	555-7412
C	1201	Poyraz	Sert	Wgigigigws'u Etkinleştir Windows'u etkinleştirmek için Ayarlar'a gidin.

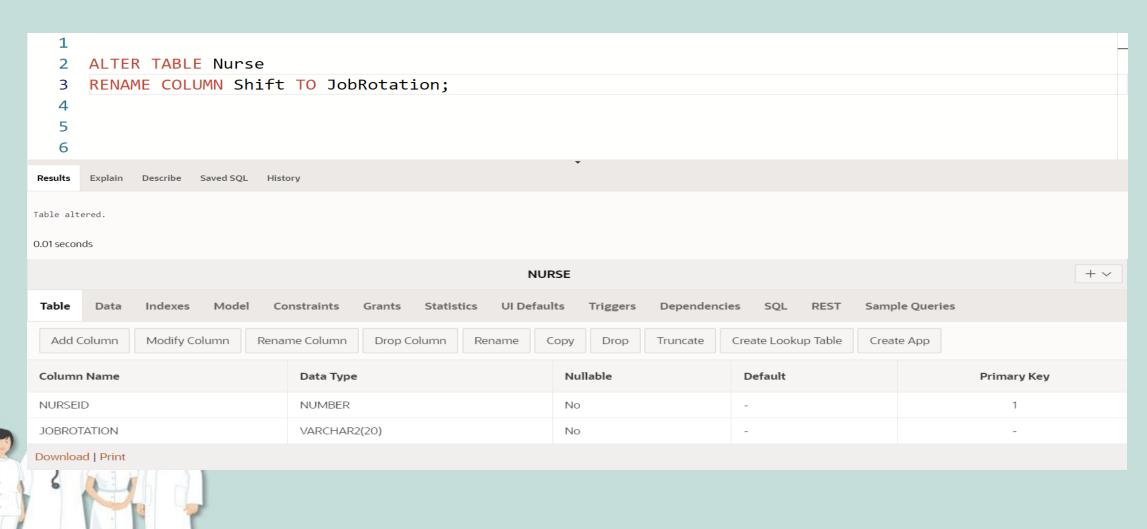
ALTER TABLE FUNCTION



ALTER TABLE (DROP) FUNCTION



ALTER TABLE (RENAME) FUNCTION



ALTER TABLE (MODIFY) FUNCTION

