Electronic Medical Records Database

Name: Ariel Rafaelov

SID: 2073

Class: CSCI 331-32

Submission: 11-18-19

Project #2

**DATABASE DESIGN**

create table Patients(

PatientID number primary key,

PatientFirst varchar(30) not null,

PatientLast varchar(30) not null,

DOB date not null,

Age number not null,

Gender char(1) not null,

Phone char(10),

Email varchar(35));

Create table Address(

addressID number primary key,

PatientID number not null,

foreign key(PatientID) references Patients(PatientID),

Street varchar(40) not null,

city varchar(30) not null,

Zipcode char(5) not null);

Create table Staff(

StaffID number primary key,

StaffFirst varchar(30) not null,

StaffLast varchar(30) not null,

Title varchar(30) not null);

create table Office(

roomnum number primary key);

create table Visits(

VisitID number primary key,

PatientID number not null,

StaffID number not null,

RoomNum number not null,

foreign key(PatientID) references Patients(PatientID),

foreign key(StaffID) references Staff(StaffID),

VisitDate date not null,

foreign key(roomnum) references Office(roomnum));

create table procedures(

ProcedureID number primary key,

visitID number not null,

procedureName varchar(30) not null,

procedureDate date not null,

results varchar(30) not null,

StaffID number not null,

BILL decimal (10, 2) not null,

RoomNum number not null,

foreign key(visitID) references visits(visitID),

foreign key(StaffID) references Staff(StaffID),

foreign key(roomnum) references Office(roomnum));

Create table Diagnosis(

DIAGNOSISID NUMBER PRIMARY KEY,

VISITID NUMBER NOT NULL,

PROCEDUREID NUMBER,

DIAGNOSISNAME VARCHAR(30) NOT NULL,

DIAGNOSISDATE DATE NOT NULL,

STAFFID NUMBER NOT NULL,

ROOMNUM NUMBER NOT NULL,

FOREIGN KEY(VISITID) REFERENCES VISITS(VISITID),

FOREIGN KEY(PROCEDUREID) REFERENCES PROCEDURES(PROCEDUREID),

FOREIGN KEY(STAFFID) REFERENCES STAFF(STAFFID),

FOREIGN KEY(ROOMNUM) REFERENCES OFFICE(ROOMNUM));

CREATE TABLE ALLERGIES(

ALLERGYID NUMBER PRIMARY KEY,

DIAGNOSISID NUMBER NOT NULL,

ALLERGYTO VARCHAR(30) NOT NULL,

FOREIGN KEY(DIAGNOSISID) REFERENCES DIAGNOSIS(DIAGNOSISID));

CREATE TABLE MEDICATION(

MEDICATIONID NUMBER PRIMARY KEY,

PATIENTID NUMBER NOT NULL,

MEDICATIONNAME VARCHAR(30) NOT NULL,

DOSAGE CHAR(6) NOT NULL,

STARTDATE DATE NOT NULL,

ENDDATE DATE NOT NULL,

FOREIGN KEY(PATIENTID) REFERENCES PATIENTS(PATIENTID));

create sequence patientID\_SEQ

increment by 1

start with 1000;

insert into patients(patientid,patientfirst,patientlast,dob,age,gender,phone,email)

values(patientid\_SEQ.nextval,'HARRY','PETERS',TO\_DATE('1999-07-21','YYYY-MM-DD'),20,'M','3478884455','HARRYPETERS@GMAIL.COM');

insert into patients(patientid,patientfirst,patientlast,dob,age,gender,phone,email)

values(patientid\_SEQ.nextval,'ANITA','PEA',TO\_DATE('1996-05-16','YYYY-MM-DD'),23,'F','3478885555','ANITAPEA@GMAIL.COM');

insert into patients(patientid,patientfirst,patientlast,dob,age,gender,phone,email)

values(patientid\_SEQ.nextval,'BEN','DOVER',TO\_DATE('1969-02-16','YYYY-MM-DD'),50,'M','3478885567','BENDOVER69@GMAIL.COM');

insert into patients(patientid,patientfirst,patientlast,dob,age,gender,phone,email)

values(patientid\_SEQ.nextval,'CONNIE','LINGUS',TO\_DATE('1988-03-24','YYYY-MM-DD'),34,'F','3478888796','CONNIELINGUS@HOTMAIL.COM');

insert into patients(patientid,patientfirst,patientlast,dob,age,gender,phone,email)

values(patientid\_SEQ.nextval,'HUGH','MUNGUS',TO\_DATE('1970-09-24','YYYY-MM-DD'),49,'M','3478888787','HUGHMUNGUS70@GMAIL.COM');

insert into patients(patientid,patientfirst,patientlast,dob,age,gender,phone,email)

values(patientid\_SEQ.nextval,'LOU','SANUS',TO\_DATE('2000-10-11','YYYY-MM-DD'),19,'F','3478889789','LOUSANUS@GMAIL.COM');

insert into patients(patientid,patientfirst,patientlast,dob,age,gender,phone,email)

values(patientid\_SEQ.nextval,'TARA','HIMEN',TO\_DATE('1995-11-03','YYYY-MM-DD'),24,'F','3478789789','TERAHIMEN@GMAIL.COM')

insert into patients(patientid,patientfirst,patientlast,dob,age,gender,phone,email)

values(patientid\_SEQ.nextval,'ANYA','NEEZE',TO\_DATE('1998-03-15','YYYY-MM-DD'),21,'F','3478785789','ANYANEEZE@YAHOO.COM');

insert into patients(patientid,patientfirst,patientlast,dob,age,gender,phone,email)

values(patientid\_SEQ.nextval,'COLIN','REEDS',TO\_DATE('1999-12-15','YYYY-MM-DD'),21,'M','3478735789','COLINREEDS55@YAHOO.COM');

insert into patients(patientid,patientfirst,patientlast,dob,age,gender,phone,email)

values(patientid\_SEQ.nextval,'ERIC','SHUN',TO\_DATE('2001-9-10','YYYY-MM-DD'),18,'M','3478735780','ERICSHUN@HOTMAIL.COM');

insert into patients(patientid,patientfirst,patientlast,dob,age,gender,phone,email)

values(patientid\_SEQ.nextval,'JACK','HUGHMAN',TO\_DATE('1945-4-20','YYYY-MM-DD'),74,'M','3478735180','JACKHUGHMAN@GMAIL.COM');

insert into patients(patientid,patientfirst,patientlast,dob,age,gender,phone,email)

values(patientid\_SEQ.nextval,'JENNY','TIELS',TO\_DATE('1997-6-21','YYYY-MM-DD'),22,'F','3478745180','JENNYTIELS@GMAIL.COM');

insert into patients(patientid,patientfirst,patientlast,dob,age,gender,phone,email)

values(patientid\_SEQ.nextval,'EMMA','STONE',TO\_DATE('1993-08-03','YYYY-MM-DD'),26,'F','3478745140','EMMASTONE@GMAIL.COM');

insert into patients(patientid,patientfirst,patientlast,dob,age,gender,phone,email)

values(patientid\_SEQ.nextval,'FAUX','SEIKH',TO\_DATE('1988-08-03','YYYY-MM-DD'),31,'M','3478748840','FAUXSEIKH@GMAIL.COM');

insert into patients(patientid,patientfirst,patientlast,dob,age,gender,phone,email)

values(patientid\_SEQ.nextval,'GABE','NEWELL',TO\_DATE('1944-01-25','YYYY-MM-DD'),75,'F','3478778840','GABENEWELL@GMAIL.COM');

update patients

set age = trunc((sysdate-dob)/365);

CREATE SEQUENCE STAFFID\_SEQ

INCREMENT BY 1

START WITH 2000;

INSERT INTO STAFF(STAFFID,STAFFFIRST,STAFFLAST,TITLE)

VALUES(STAFFID\_SEQ.NEXTVAL,'DON','KRILL','DOCTOR');

INSERT INTO STAFF(STAFFID,STAFFFIRST,STAFFLAST,TITLE)

VALUES(STAFFID\_SEQ.NEXTVAL,'PHIL','JACKSON','SECRETARY');

INSERT INTO STAFF(STAFFID,STAFFFIRST,STAFFLAST,TITLE)

VALUES(STAFFID\_SEQ.NEXTVAL,'MATTHEW','KIMBERLY','NURSE');

INSERT INTO STAFF(STAFFID,STAFFFIRST,STAFFLAST,TITLE)

VALUES(STAFFID\_SEQ.NEXTVAL,'ROBERT','JOHNSEN','DOCTOR');

INSERT INTO STAFF(STAFFID,STAFFFIRST,STAFFLAST,TITLE)

VALUES(STAFFID\_SEQ.NEXTVAL,'WILLIAM','WHITE','ONCOLOGIST');

INSERT INTO STAFF(STAFFID,STAFFFIRST,STAFFLAST,TITLE)

VALUES(STAFFID\_SEQ.NEXTVAL,'SHARON','HERNANDEZ','PHYSICIANS ASSISTANT');

INSERT INTO STAFF(STAFFID,STAFFFIRST,STAFFLAST,TITLE)

VALUES(STAFFID\_SEQ.NEXTVAL,'KEVIN','BROWN','PHYSICIAN');

CREATE SEQUENCE ADDRESSID\_SEQ

INCREMENT BY 1

START WITH 8000;

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1029,'420 RIDGEVIEW COURT','SPRING VALLEY',10977);

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1040,'61 HARTFORD LANE','NEWYORK',10032);

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1041,'668 NW.KETCH HARBOR ST.','NEWYORK',10027);

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1042,'289WOODSIDE AVENUE','TROY',12180);

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1043,'9181 HIGH POINT STREET','BROOKLYN',11238);

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1044,'7 ASHLEY DR.','BRONX',10466);

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1045,'270 WINDFALL DR.','BROOKLYN',11234);

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1046,'383 WEST INDIAN SPRING DR.','NEWYORK',10009);

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1047,'399 ROCKY RIVER ST.','NEWYORK',10023);

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1048,'468 INVERNESS AVE.','FLUSHING',11355);

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1049,'394 MOUNTAINVIEW DRIVE','PATCHOGUE',11772);

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1050,'7200 WESTMINSTER STREET','ASTORIA',11105);

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1051,'7988 ROCKCREST AVE.','FOREST HILLS',11375);

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1052,'152 DEVONSHIRE STREET','BRONX',10452);

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1053,'9 HARTFORD DRIVE','BRONX',10451);

INSERT INTO ADDRESS(ADDRESSID,PATIENTID,STREET,CITY,ZIPCODE)

VALUES(ADDRESSID\_SEQ.NEXTVAL,1048,'7615 BRIARWOOD DRIVE','NEWYORK',10024);

INSERT INTO OFFICE(ROOMNUM)

VALUES(101);

INSERT INTO OFFICE(ROOMNUM)

VALUES(102);

INSERT INTO OFFICE(ROOMNUM)

VALUES(103);

INSERT INTO OFFICE(ROOMNUM)

VALUES(104);

INSERT INTO OFFICE(ROOMNUM)

VALUES(105);

INSERT INTO OFFICE(ROOMNUM)

VALUES(106);

select \*

from PATIENTS;

CREATE SEQUENCE VISITID\_SEQ

INCREMENT BY 1

START WITH 3000;

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1029,2000,101,TO\_DATE('2019-11-15','YYYY-MM-DD'));

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1040,2021,101,TO\_DATE('2004-05-16','YYYY-MM-DD'));

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1041,2021,101,TO\_DATE('2001-09-23','YYYY-MM-DD'));

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1050,2024,101,TO\_DATE('2016-04-07','YYYY-MM-DD'));

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1042,2021,101,TO\_DATE('2018-10-01','YYYY-MM-DD'));

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1043,2021,101,TO\_DATE('2018-05-30','YYYY-MM-DD'));

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1051,2021,102,TO\_DATE('2019-02-05','YYYY-MM-DD'));

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1044,2021,102,TO\_DATE('2019-05-30','YYYY-MM-DD'));

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1045,2022,102,TO\_DATE('2017-12-15','YYYY-MM-DD'));

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1052,2024,102,TO\_DATE('2017-01-22','YYYY-MM-DD'));

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1046,2021,102,TO\_DATE('2018-03-12','YYYY-MM-DD'));

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1047,2021,101,TO\_DATE('2019-08-02','YYYY-MM-DD'));

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1053,2021,101,TO\_DATE('2019-07-07','YYYY-MM-DD'));

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1048,2022,102,TO\_DATE('2019-03-09','YYYY-MM-DD'));

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1049,2021,101,TO\_DATE('2019-07-30','YYYY-MM-DD'));

INSERT INTO VISITS(VISITID,PATIENTID,STAFFID,ROOMNUM,VISITDATE)

VALUES(VISITID\_SEQ.NEXTVAL,1053,2021,101,TO\_DATE('2019-08-16','YYYY-MM-DD'));

CREATE SEQUENCE PROCEDUREID\_SEQ

INCREMENT BY 1

START WITH 4000;

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3000,'ULTRASOUND',TO\_DATE('2019-11-15','YYYY-MM-DD'),'INFECTION SPOTTED',2000,300.57,105);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3000,'ULTRASOUND',TO\_DATE('2019-11-30','YYYY-MM-DD'),'NO PROBLEMS',2023,300.23,103);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3040,'CHEMOTHERAPY',TO\_DATE('2019-08-16','YYYY-MM-DD'),'CANCER STILL SPOTTED',2025,6500,105);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3020,'HEPATITIS B VACCINE',TO\_DATE('2004-05-19','YYYY-MM-DD'),'GOOD',2028,32.89,104);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3025,'HEPATITIS B VACCINE',TO\_DATE('2019-04-12','YYYY-MM-DD'),'GOOD',2024,32.89,104);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3030,'CHEMOTHERAPY',TO\_DATE('2019-08-30','YYYY-MM-DD'),'CANCER STILL THERE',2025,6500,103);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3030,'CHEMOTHERAPY',TO\_DATE('2019-08-19','YYYY-MM-DD'),'CANCER STILL THERE',2025,6500,103);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3023,'VACCINE',TO\_DATE('2018-10-05','YYYY-MM-DD'),'GOOD',2022,21.22,104);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3024,'VACCINE',TO\_DATE('2018-06-04','YYYY-MM-DD'),'GOOD',2023,21.24,104);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3025,'VACCINE',TO\_DATE('2019-02-10','YYYY-MM-DD'),'ALLERGIC REACTION',2023,21.20,103);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3026,'VACCINE',TO\_DATE('2019-06-02','YYYY-MM-DD'),'GOOD',2028,21.30,104);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3029,'VACCINE',TO\_DATE('2018-03-18','YYYY-MM-DD'),'ALLERGIC REACTION',2029,21.22,103);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3030,'VACCINE',TO\_DATE('2019-08-05','YYYY-MM-DD'),'GOOD',2000,21.24,104);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3031,'VACCINE',TO\_DATE('2019-07-08','YYYY-MM-DD'),'ALLERGIC REACTION',2022,21.20,104);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3032,'VACCINE',TO\_DATE('2019-03-12','YYYY-MM-DD'),'GOOD',2024,21.30,103);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3033,'VACCINE',TO\_DATE('2019-07-30','YYYY-MM-DD'),'GOOD',2024,21.55,103);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3024,'VACCINE',TO\_DATE('2018-05-31','YYYY-MM-DD'),'GOOD',2028,21.80,103);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3029,'VACCINE',TO\_DATE('2018-03-18','YYYY-MM-DD'),'ALLERGIC REATION',2029,21.01,104);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3031,'VACCINE',TO\_DATE('2019-07-10','YYYY-MM-DD'),'GOOD',2000,21.05,103);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3023,'VACCINE',TO\_DATE('2018-10-01','YYYY-MM-DD'),'GOOD',2022,21.01,104);

INSERT INTO PROCEDURES(PROCEDUREID,VISITID,PROCEDURENAME,PROCEDUREDATE,RESULTS,STAFFID,BILL,ROOMNUM)

VALUES(PROCEDUREID\_SEQ.NEXTVAL,3000,'VACCINE',TO\_DATE('2019-11-29','YYYY-MM-DD'),'ALLERGIC REACTION',2023,21.55,104);

UPDATE PROCEDURES

SET ROOMNUM = 103

WHERE PROCEDUREID = 4000;

update procedures

set visitid = 3024

where procedureid = 4035;

update procedures

set visitid = 3029

where procedureid = 4034;

update procedures

set visitid = 3023

where procedureid = 4038;

update procedures

set visitid = 3000

where procedureid = 4037;

update procedures

set procedurename = 'X-RAY'

where procedureid = 4024;

UPDATE PROCEDURES

SET RESULTS='CANCER CELLS FOUND'

WHERE PROCEDUREID=4024;

CREATE SEQUENCE DIAGNOSISID\_SEQ

INCREMENT BY 1

START WITH 5000;

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,PROCEDUREID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3000,4000,'INFECTION',TO\_DATE('2019-11-15','YYYY-MM-DD'),2000,105);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,PROCEDUREID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3030,4023,'CANCER',TO\_DATE('2019-08-30','YYYY-MM-DD'),2023,106);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,PROCEDUREID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3030,4024,'TUMOR',TO\_DATE('2019-08-19','YYYY-MM-DD'),2028,105);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,PROCEDUREID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3025,4027,'ALLERGY',TO\_DATE('2019-08-19','YYYY-MM-DD'),2028,105);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,PROCEDUREID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3029,4029,'ALLERGY',TO\_DATE('2018-03-18','YYYY-MM-DD'),2024,106);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,PROCEDUREID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3031,4031,'ALLERGY',TO\_DATE('2019-07-08','YYYY-MM-DD'),2025,105);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,PROCEDUREID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3024,4035,'ALLERGY',TO\_DATE('2018-03-18','YYYY-MM-DD'),2025,105);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,PROCEDUREID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3023,4038,'ALLERGY',TO\_DATE('2019-11-29','YYYY-MM-DD'),2022,106);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,PROCEDUREID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3040,4040,'CANCER',TO\_DATE('2019-08-16','YYYY-MM-DD'),2023,106);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3020,'SWELLING',TO\_DATE('2004-05-16','YYYY-MM-DD'),2023,106);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3021,'COMMON COLD',TO\_DATE('2001-09-23','YYYY-MM-DD'),2024,106);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3026,'COMMON COLD',TO\_DATE('2019-05-31','YYYY-MM-DD'),2028,105);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3027,'FLU',TO\_DATE('2017-12-15','YYYY-MM-DD'),2029,105);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3028,'COMMON COLD',TO\_DATE('2017-01-23','YYYY-MM-DD'),2000,105);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3032,'FLU',TO\_DATE('2019-03-09','YYYY-MM-DD'),2022,106);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3033,'COMMON COLD',TO\_DATE('2019-07-30','YYYY-MM-DD'),2023,106);

INSERT INTO DIAGNOSIS(DIAGNOSISID,VISITID,DIAGNOSISNAME,DIAGNOSISDATE,STAFFID,ROOMNUM)

VALUES(DIAGNOSISID\_SEQ.NEXTVAL,3022,'COMMON COLD',TO\_DATE('2016-04-07','YYYY-MM-DD'),2024,106);

CREATE SEQUENCE ALLERGYID\_SEQ

INCREMENT BY 1

START WITH 6000;

INSERT INTO ALLERGIES(ALLERGYID,DIAGNOSISID,ALLERGYTO)

VALUES(ALLERGYID\_SEQ.NEXTVAL,5000,'LATEX');

INSERT INTO ALLERGIES(ALLERGYID,DIAGNOSISID,ALLERGYTO)

VALUES(ALLERGYID\_SEQ.NEXTVAL,5046,'KIWI');

INSERT INTO ALLERGIES(ALLERGYID,DIAGNOSISID,ALLERGYTO)

VALUES(ALLERGYID\_SEQ.NEXTVAL,5040,'NUTS');

INSERT INTO ALLERGIES(ALLERGYID,DIAGNOSISID,ALLERGYTO)

VALUES(ALLERGYID\_SEQ.NEXTVAL,5041,'BEES');

INSERT INTO ALLERGIES(ALLERGYID,DIAGNOSISID,ALLERGYTO)

VALUES(ALLERGYID\_SEQ.NEXTVAL,5042,'VACCINES');

INSERT INTO ALLERGIES(ALLERGYID,DIAGNOSISID,ALLERGYTO)

VALUES(ALLERGYID\_SEQ.NEXTVAL,5043,'VACCINES');

INSERT INTO ALLERGIES(ALLERGYID,DIAGNOSISID,ALLERGYTO)

VALUES(ALLERGYID\_SEQ.NEXTVAL,5044,'VACCINES');

INSERT INTO ALLERGIES(ALLERGYID,DIAGNOSISID,ALLERGYTO)

VALUES(ALLERGYID\_SEQ.NEXTVAL,5045,'VACCINES');

INSERT INTO ALLERGIES(ALLERGYID,DIAGNOSISID,ALLERGYTO)

VALUES(ALLERGYID\_SEQ.NEXTVAL,5047,'NUTS');

INSERT INTO ALLERGIES(ALLERGYID,DIAGNOSISID,ALLERGYTO)

VALUES(ALLERGYID\_SEQ.NEXTVAL,5048,'BANANA');

INSERT INTO ALLERGIES(ALLERGYID,DIAGNOSISID,ALLERGYTO)

VALUES(ALLERGYID\_SEQ.NEXTVAL,5060,'STRAWBERRY');

INSERT INTO ALLERGIES(ALLERGYID,DIAGNOSISID,ALLERGYTO)

VALUES(ALLERGYID\_SEQ.NEXTVAL,5061,'STRAWBERRY');

INSERT INTO ALLERGIES(ALLERGYID,DIAGNOSISID,ALLERGYTO)

VALUES(ALLERGYID\_SEQ.NEXTVAL,5062,'LATEX');

INSERT INTO ALLERGIES(ALLERGYID,DIAGNOSISID,ALLERGYTO)

VALUES(ALLERGYID\_SEQ.NEXTVAL,5063,'LATEX');

INSERT INTO ALLERGIES(ALLERGYID,DIAGNOSISID,ALLERGYTO)

VALUES(ALLERGYID\_SEQ.NEXTVAL,5064,'BEES');

CREATE SEQUENCE MEDICATIONID\_SEQ

INCREMENT BY 1

START WITH 7000;

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1029,'ANTIBIOTICS','500 MG',TO\_DATE('2019-11-15','YYYY-MM-DD'),TO\_DATE('2019-11-29','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1029,'PAIN MEDICATION','80 MG',TO\_DATE('2019-11-15','YYYY-MM-DD'),TO\_DATE('2019-11-22','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1047,'PAIN MEDICATION','80 MG',TO\_DATE('2004-05-16','YYYY-MM-DD'),TO\_DATE('2004-05-30','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1047,'ANTIBIOTICS','500 MG',TO\_DATE('2004-05-16','YYYY-MM-DD'),TO\_DATE('2004-05-30','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1047,'PAIN MEDICATION','80 MG',TO\_DATE('2019-08-19','YYYY-MM-DD'),TO\_DATE('2019-08-29','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1051,'PAIN MEDICATION','80 MG',TO\_DATE('2019-08-30','YYYY-MM-DD'),TO\_DATE('2019-09-10','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1046,'PAIN MEDICATION','80 MG',TO\_DATE('2019-02-10','YYYY-MM-DD'),TO\_DATE('2019-02-12','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1046,'ANTIBIOTICS','500 MG',TO\_DATE('2019-02-10','YYYY-MM-DD'),TO\_DATE('2019-02-20','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1053,'ANTIBIOTICS','500 MG',TO\_DATE('2019-07-08','YYYY-MM-DD'),TO\_DATE('2019-07-18','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1053,'PAIN MEDICATION','80 MG',TO\_DATE('2019-07-08','YYYY-MM-DD'),TO\_DATE('2019-07-18','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1043,'PAIN MEDICATION','80 MG',TO\_DATE('2018-03-18','YYYY-MM-DD'),TO\_DATE('2018-03-28','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1043,'ANTIBIOTICS','500 MG',TO\_DATE('2018-03-18','YYYY-MM-DD'),TO\_DATE('2018-03-28','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1042,'ANTIBIOTICS','500 MG',TO\_DATE('2019-11-29','YYYY-MM-DD'),TO\_DATE('2019-12-05','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1042,'PAIN MEDICATION','80 MG',TO\_DATE('2019-11-29','YYYY-MM-DD'),TO\_DATE('2019-12-05','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1040,'PAIN MEDICATION','80 MG',TO\_DATE('2004-05-16','YYYY-MM-DD'),TO\_DATE('2004-05-26','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1040,'ANTIBIOTICS','500 MG',TO\_DATE('2004-05-16','YYYY-MM-DD'),TO\_DATE('2004-05-26','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1041,'MEDICATION X','30 MG',TO\_DATE('2001-09-23','YYYY-MM-DD'),TO\_DATE('2001-09-30','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1041,'MEDICATION Y','90 MG',TO\_DATE('2001-09-23','YYYY-MM-DD'),TO\_DATE('2001-09-30','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1044,'MEDICATION X','30 MG',TO\_DATE('2019-05-31','YYYY-MM-DD'),TO\_DATE('2019-06-10','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1044,'MEDICATION Y','90 MG',TO\_DATE('2019-05-31','YYYY-MM-DD'),TO\_DATE('2019-06-10','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1045,'MEDICATION Z','50 MG',TO\_DATE('2017-12-15','YYYY-MM-DD'),TO\_DATE('2017-12-25','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1045,'MEDICATION X','30 MG',TO\_DATE('2017-12-15','YYYY-MM-DD'),TO\_DATE('2017-12-25','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1052,'MEDICATION Y','90 MG',TO\_DATE('2017-01-23','YYYY-MM-DD'),TO\_DATE('2017-01-31','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1052,'MEDICATION X','30 MG',TO\_DATE('2017-01-23','YYYY-MM-DD'),TO\_DATE('2017-01-31','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1048,'MEDICATION Y','90 MG',TO\_DATE('2019-03-09','YYYY-MM-DD'),TO\_DATE('2019-03-19','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1048,'MEDICATION Z','50 MG',TO\_DATE('2019-03-09','YYYY-MM-DD'),TO\_DATE('2019-03-19','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1049,'MEDICATION X','30 MG',TO\_DATE('2019-07-30','YYYY-MM-DD'),TO\_DATE('2019-08-10','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1049,'MEDICATION Y','90 MG',TO\_DATE('2019-07-30','YYYY-MM-DD'),TO\_DATE('2019-08-10','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1050,'MEDICATION X','30 MG',TO\_DATE('2016-04-07','YYYY-MM-DD'),TO\_DATE('2016-04-17','YYYY-MM-DD'));

INSERT INTO MEDICATION(MEDICATIONID,PATIENTID,MEDICATIONNAME,DOSAGE,STARTDATE,ENDDATE)

VALUES(MEDICATIONID\_SEQ.NEXTVAL,1050,'MEDICATION Y','90 MG',TO\_DATE('2016-04-07','YYYY-MM-DD'),TO\_DATE('2016-04-17','YYYY-MM-DD'));

**Questions and Answers**

1. Identify procedures performed for patient Connie Lingus’s visit Last month. Display the patient name, procedure name, date of procedure and procedure cost.

SELECT PATIENTFIRST,PATIENTLAST,PROCEDURENAME,PROCEDUREDATE,BILL

FROM PATIENTS,VISITS,PROCEDURES

WHERE PATIENTFIRST='CONNIE'

AND PATIENTLAST='LINGUS'

AND PATIENTS.PATIENTID=VISITS.PATIENTID

AND VISITS.VISITID=PROCEDURES.VISITID;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PATIENTFIRST | PATIENTLAST | PROCEDURENAME | PROCEDUREDATE | BILL |
| CONNIE | LINGUS | VACCINE | 05-OCT-18 | 21.22 |
| CONNIE | LINGUS | VACCINE | 29-NOV-19 | 21.55 |

2. Identify patients that have never received the hepatitis B vaccine. Display the patient name age, date of birth and address. Order the output alphabetically by patient name.

SELECT PATIENTFIRST,PATIENTLAST,AGE,DOB,STREET,CITY,ZIPCODE

FROM PATIENTS,ADDRESS,VISITS,PROCEDURES

WHERE PROCEDURENAME='HEPATITIS B VACCINE'

AND PATIENTS.PATIENTID=ADDRESS.PATIENTID

AND PATIENTS.PATIENTID=VISITS.PATIENTID

AND VISITS.VISITID=PROCEDURES.VISITID;

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| PATIENTFIRST | PATIENTLAST | AGE | DOB | STREET | CITY | ZIPCODE |
| ANITA | PEA | 23 | 16-MAY-96 | 61 HARTFORD LANE | NEWYORK | 10032 |
| EMMA | STONE | 26 | 03-AUG-93 | 7988 ROCKCREST AVE. | FOREST HILLS | 11375 |

3. Identify the procedures performed by a Doctor last month. Display the procedure name, procedure date and patient name.

SELECT PROCEDURENAME,PROCEDUREDATE,PATIENTFIRST,PATIENTLAST

FROM PATIENTS,VISITS,PROCEDURES,STAFF

WHERE TITLE='DOCTOR'

AND STAFF.STAFFID=PROCEDURES.STAFFID

AND PATIENTS.PATIENTID=VISITS.PATIENTID

AND VISITS.VISITID=PROCEDURES.VISITID

AND PROCEDUREDATE>=TO\_DATE('2019-10-18','YYYY-MM-DD');

|  |  |  |  |
| --- | --- | --- | --- |
| PROCEDURENAME | PROCEDUREDATE | PATIENTFIRST | PATIENTLAST |
| ULTRASOUND | 30-NOV-19 | HARRY | PETERS |
| VACCINE | 29-NOV-19 | CONNIE | LINGUS |
| ULTRASOUND | 15-NOV-19 | HARRY | PETERS |

4. Identify patients with an abnormal cell formation 3 months ago. Display the patient name, procedure name and procedure result.

SELECT PATIENTFIRST,PATIENTLAST,PROCEDURENAME,RESULTS

FROM PATIENTS,VISITS,PROCEDURES,DIAGNOSIS

WHERE DIAGNOSISNAME='TUMOR'

AND VISITS.VISITID=DIAGNOSIS.VISITID

AND PATIENTS.PATIENTID=VISITS.PATIENTID

AND VISITS.VISITID=PROCEDURES.VISITID

AND PROCEDUREDATE>=TO\_DATE('2019-08-18','YYYY-MM-DD');

|  |  |  |  |
| --- | --- | --- | --- |
| PATIENTFIRST | PATIENTLAST | PROCEDURENAME | RESULTS |
| COLIN | REEDS | X-RAY | CANCER CELLS FOUND |
| COLIN | REEDS | CHEMOTHERAPY | CANCER STILL THERE |

5. Identify patients who were diagnosed with cancer in the 5 months and are being treated with chemotherapy. Display the patient name and procedure. Display the output alphabetically by patient name.

SELECT PATIENTFIRST,PATIENTLAST,PROCEDURENAME

FROM PATIENTS,VISITS,PROCEDURES,DIAGNOSIS

WHERE DIAGNOSISNAME='CANCER'AND PROCEDURENAME='CHEMOTHERAPY'

AND VISITS.VISITID=DIAGNOSIS.VISITID

AND PATIENTS.PATIENTID=VISITS.PATIENTID

AND VISITS.VISITID=PROCEDURES.VISITID

AND PROCEDUREDATE>=TO\_DATE('2019-06-18','YYYY-MM-DD')

ORDER BY 1 ASC;

|  |  |  |
| --- | --- | --- |
| PATIENTFIRST | PATIENTLAST | PROCEDURENAME |
| COLIN | REEDS | CHEMOTHERAPY |
| GABE | NEWELL | CHEMOTHERAPY |

6. Identify staff who have not performed any procedures in the last year. Display the staff name. Display the output alphabetically by staff name.

SELECT STAFFFIRST,STAFFLAST

FROM STAFF

WHERE STAFFID NOT IN

(SELECT STAFFID

FROM PROCEDURES

WHERE PROCEDUREDATE>=TO\_DATE('2018-11-18','YYYY-MM-DD'))

ORDER BY 1 ASC;

|  |  |
| --- | --- |
| STAFFFIRST | STAFFLAST |
| JON | SMITH |
| KEVIN | BROWN |
| PHIL | JACKSON |
| SHARON | HERNANDEZ |

7. Identify patients who have not visited with medical staff in the last 2 years. Display the patient name and email. Display the output alphabetically by patient name.

SELECT PATIENTFIRST,PATIENTLAST,EMAIL

FROM PATIENTS

WHERE PATIENTID NOT IN

(SELECT PATIENTID

FROM VISITS

WHERE VISITDATE>=TO\_DATE('2017-11-18','YYYY-MM-DD'))

ORDER BY 1 ASC;

|  |  |  |
| --- | --- | --- |
| PATIENTFIRST | PATIENTLAST | EMAIL |
| ANITA | PEA | [ANITAPEA@GMAIL.COM](mailto:ANITAPEA@GMAIL.COM) |
| BEN | DOVER | [BENDOVER69@GMAIL.COM](mailto:BENDOVER69@GMAIL.COM) |
| FAUX | SEIKH | [FAUXSEIKH@GMAIL.COM](mailto:FAUXSEIKH@GMAIL.COM) |
| JENNY | TIELS | [JENNYTIELS@GMAIL.COM](mailto:JENNYTIELS@GMAIL.COM) |

8. Identify the number of procedures performed in the last 2 years. Display at least three columns: office location, procedure name and number of procedures. Display one row for each distinct office and procedure name. Display the output alphabetically by office location and procedure.

SELECT OFFICE.ROOMNUM,PROCEDURENAME,COUNT(\*)"NUMBER OF PROCEDURES"

FROM OFFICE,PROCEDURES

WHERE OFFICE.ROOMNUM=PROCEDURES.ROOMNUM

AND PROCEDUREDATE>=TO\_DATE('2017-11-18','YYYY-MM-DD')

GROUP BY OFFICE.ROOMNUM,PROCEDURENAME

ORDER BY 2 ASC;

|  |  |  |
| --- | --- | --- |
| ROOMNUM | PROCEDURENAME | NUMBER OF PROCEDURES |
| 103 | CHEMOTHERAPY | 1 |
| 105 | CHEMOTHERAPY | 1 |
| 104 | HAPATITIS B VACCINE | 1 |
| 103 | ULTRASOUND | 2 |
| 103 | VACCINE | 6 |
| 104 | VACCINE | 8 |
| 103 | X-RAY | 1 |

9. Identify the number of patients who had procedures in the last year. Display four columns: patient first and last name, number of procedures and total cost. Display one row for each distinct patient name. Display the output alphabetically by patient name.

SELECT PATIENTFIRST,PATIENTLAST,COUNT(\*)"NUMBER OF PROCEDURES",SUM(BILL)"BILL"

FROM PATIENTS,VISITS,PROCEDURES

WHERE PATIENTS.PATIENTID=VISITS.PATIENTID

AND VISITS.VISITID=PROCEDURES.VISITID

AND PROCEDUREDATE>=TO\_DATE('2018-11-18','YYYY-MM-DD')

GROUP BY PATIENTFIRST,PATIENTLAST

ORDER BY 1 ASC;

|  |  |  |  |
| --- | --- | --- | --- |
| PATIENTFIRST | PATIENTLAST | NUMBER OF PROCEDURES | BILL |
| COLIN | REEDS | 3 | 13021.24 |
| CONNIE | LINGUS | 1 | 21.55 |
| EMMA | STONE | 2 | 54.09 |
| ERIC | SHUN | 1 | 21.3 |
| GABE | NEWELL | 3 | 6542.25 |
| HARRY | PETERS | 2 | 600.8 |
| JACK | HUGHMAN | 1 | 21.55 |
| LOU | SANUS | 1 | 21.3 |

10. Identify the number of procedures performed at each office in the last year. Display at least two columns: office location and number of procedures. Display the output alphabetically by office location.

SELECT OFFICE.ROOMNUM,COUNT(\*)"NUMBER OF PROCEDURES"

FROM OFFICE,PROCEDURES

WHERE OFFICE.ROOMNUM=PROCEDURES.ROOMNUM

AND PROCEDUREDATE>=TO\_DATE('2018-11-18','YYYY-MM-DD')

GROUP BY OFFICE.ROOMNUM

ORDER BY 1 ASC;

|  |  |
| --- | --- |
| ROOMNUM | NUMBER OF PROCEDURES |
| 103 | 8 |
| 104 | 5 |
| 105 | 1 |

11. Identify the revenue generated by each procedure in the last 2 years. Display three columns: procedure name, number of procedures and total revenue/cost. Display one row for each distinct patient name. Display the output alphabetically by procedure name.

SELECT PROCEDURENAME,COUNT(\*)"NUMBER OF PROCEDURES",SUM(BILL)"TOTAL REVENUE"

FROM PATIENTS,VISITS,PROCEDURES

WHERE PATIENTS.PATIENTID=VISITS.PATIENTID

AND VISITS.VISITID=PROCEDURES.VISITID

AND PROCEDUREDATE>=TO\_DATE('2017-11-18','YYYY-MM-DD')

GROUP BY PROCEDURENAME

ORDER BY 1 ASC;

|  |  |  |
| --- | --- | --- |
| PROCEDURENAME | NUMBER OF PROCEDURES | TOTAL REVENUE |
| CHEMOTHERAPY | 2 | 13000 |
| HEPATITIS B VACCINE | 1 | 32.89 |
| ULTRASOUND | 2 | 600.8 |
| VACCINE | 14 | 297.89 |
| X-RAY | 1 | 6500 |

12. Display the structure of ALL tables using SQL Describe.

PATIENTS

Name Null? Type

------------ -------- ------------

PATIENTID NOT NULL NUMBER

PATIENTFIRST NOT NULL VARCHAR2(30)

PATIENTLAST NOT NULL VARCHAR2(30)

DOB NOT NULL DATE

AGE NOT NULL NUMBER

GENDER NOT NULL CHAR(1)

PHONE CHAR(10)

EMAIL VARCHAR2(35)

ADDRESS

Name Null? Type

--------- -------- ------------

ADDRESSID NOT NULL NUMBER

PATIENTID NOT NULL NUMBER

STREET NOT NULL VARCHAR2(40)

CITY NOT NULL VARCHAR2(30)

ZIPCODE NOT NULL CHAR(5)

STAFF

Name Null? Type

---------- -------- ------------

STAFFID NOT NULL NUMBER

STAFFFIRST NOT NULL VARCHAR2(30)

STAFFLAST NOT NULL VARCHAR2(30)

TITLE NOT NULL VARCHAR2(30)

VISITS

Name Null? Type

--------- -------- ------

VISITID NOT NULL NUMBER

PATIENTID NOT NULL NUMBER

STAFFID NOT NULL NUMBER

ROOMNUM NOT NULL NUMBER

VISITDATE NOT NULL DATE

OFFICE

Name Null? Type

------- -------- ------

ROOMNUM NOT NULL NUMBER

PROCEDURES

Name Null? Type

------------- -------- ------------

PROCEDUREID NOT NULL NUMBER

VISITID NOT NULL NUMBER

PROCEDURENAME NOT NULL VARCHAR2(30)

PROCEDUREDATE NOT NULL DATE

RESULTS NOT NULL VARCHAR2(30)

STAFFID NOT NULL NUMBER

BILL NOT NULL NUMBER(10,2)

ROOMNUM NOT NULL NUMBER

DIAGNOSIS

Name Null? Type

------------- -------- ------------

DIAGNOSISID NOT NULL NUMBER

VISITID NOT NULL NUMBER

PROCEDUREID NUMBER

DIAGNOSISNAME NOT NULL VARCHAR2(30)

DIAGNOSISDATE NOT NULL DATE

STAFFID NOT NULL NUMBER

ROOMNUM NOT NULL NUMBER

ALLERGIES

Name Null? Type

----------- -------- ------------

ALLERGYID NOT NULL NUMBER

DIAGNOSISID NOT NULL NUMBER

ALLERGYTO NOT NULL VARCHAR2(30)

MEDICATION

Name Null? Type

-------------- -------- ------------

MEDICATIONID NOT NULL NUMBER

DIAGNOSISID NOT NULL NUMBER

MEDICATIONNAME NOT NULL VARCHAR2(30)

DOSAGE NOT NULL CHAR(6)

STARTDATE NOT NULL DATE

ENDDATE NOT NULL DATE

13. Display the version of Oracle.

Oracle Database 18c Express Edition Release 18.0.0.0.0 - Production