**THE DIAGRAM FOR THE FOLLOWING TABLES**



**CODES FOR THE FINAL PROJECT**

CREATE DATABASE F;

USE F;

-- Create tables for the database

CREATE TABLE Patientj (

PatientLastFourOfSSN INT PRIMARY KEY IDENTITY,

EmailAddress VARCHAR(255) DEFAULT NULL UNIQUE,

PhoneNum VARCHAR(255) DEFAULT NULL,

FirstName VARCHAR(225) NOT NULL,

LastName VARCHAR(225) NOT NULL,

age VARCHAR(225) NOT NULL,

Gender VARCHAR(225) NOT NULL,

);

CREATE TABLE CareGiversj (

CareGiverID INT PRIMARY KEY IDENTITY,

FName VARCHAR(10) NOT NULL,

LName VARCHAR(255) NOT NULL,

Email VARCHAR(200) NOT NULL,

Position VARCHAR(50) NOT NULL,

Department VARCHAR(50) NOT NULL

);

CREATE TABLE PatientVisitTrackj (

VisitID INT PRIMARY KEY IDENTITY,

PatientLastFourOfSSN INT REFERENCES Patientj (PatientLastFourOfSSN),

CareGiverLName VARCHAR(10) NOT NULL,

RoomNumber INT NOT NULL,

ReasonOfVisit TEXT NOT NULL,

VisitDate DATETIME DEFAULT NULL

);

CREATE TABLE Billingj (

InsuranceID INT PRIMARY KEY IDENTITY,

VisitID INT REFERENCES PatientVisitTrackj (VisitID),

Charge MONEY NOT NULL,

Payment MONEY DEFAULT NULL,

BillingDate DATETIME DEFAULT NULL

);

CREATE TABLE Payrollj (

PaycheckID INT PRIMARY KEY IDENTITY,

CareGiverID INT REFERENCES CareGiversj (CareGiverID),

WeeklyTotalHours INT DEFAULT NULL,

WeeklyPayment MONEY NOT NULL,

);

-- The table that links The patientsj and CareGiversj tables.

CREATE TABLE PatientCareGiversja (

PatientLastFourOfSSN INT REFERENCES Patientj (PatientLastFourOfSSN),

CareGiverID INT REFERENCES CareGiversj (CareGiverID) PRIMARY KEY (PatientLastFourOfSSN, CareGiverID) IDENTITY);

--Insert data into the tables

SET IDENTITY\_INSERT Patientj ON;

INSERT INTO Patientj (PatientLastFourOfSSN, FirstName, LastName, EmailAddress, PhoneNum, age, gender) VALUES

(0841, 'Josue', 'Auguste', 'josue55aug@yahoo.fr', '845-200-4632', '30y 8m', 'Male'),

(3721, 'Ricardo', 'Cheron', 'RicardoC@yahoo.fr', '845-300-4132', '29y 6m', 'Male'),

(9779, 'Francesca', 'Lafortune', 'FrancesL@gmail.com', '275-200-4187', '27y 4m', 'Female'),

(6421, 'Presner', 'Auguste', 'PresnerA@gmail.com', '845-226-4172', '59y 1m', 'Male'),

(4327, 'Caleb', 'Sebastien', 'CalebSC@yahoo.fr', '845-260-7139', '12y 9m', 'Male'),

(2121, 'Michaella', 'Brutus', 'BMichaelaa@yahoo.com', '845-200-4122', '5y 6m', 'Memale'),

(3457, 'Marie', 'Bonny', 'MarieB@yahoo.fr', '845-600-4157', '80y 6m', 'Female'),

(8442, 'Alphonse', 'Occil', 'Aloccil@hotmail.com', '845-200-4132', '29y 7m', 'Male'),

(1632, 'Slaina', 'Jeanty', 'SlainaJ@yahoo.com', '845-200-0893', '29y 11m', 'Female'),

(5319, 'Isaac', 'Auguste', 'IsaacA@yahoo.com', '845-347-4178', '28y 4m', 'Male');

SET IDENTITY\_INSERT Patientj OFF;

SET IDENTITY\_INSERT CareGiversj ON;

INSERT INTO CareGiversj (CareGiverID, FName, LName, Email, Position, Department) VALUES

(001, 'Judes', 'Senat', 'judes55aug@yahoo.fr', 'Nurse', 'Maternity'),

(002, 'Robert', 'Romain', 'obertC@yahoo.fr', 'Nurse', 'Ginecology'),

(003, 'Clara', 'Estime', 'ClaraE@gmail.com', 'Doctor','Emergency'),

(004, 'Van', 'Grough', 'VanG@gmail.com', 'Doctor', 'Respiratory'),

(005, 'Evelyne', 'Auguste', 'EvelyneB@yahoo.fr', 'Doctor', 'Emergency'),

(006, 'Sherly', 'Nelson', 'Sherly@yahoo.com', 'Nurse', 'Maternity'),

(007, 'Abraham', 'Charles', 'Abou@yahoo.fr', 'Doctor', 'Ginecology'),

(008, 'Ralph', 'Joseph', 'RalphB@yahoo.fr', 'Nurse', 'Respiratory');

SET IDENTITY\_INSERT CareGiversj OFF;

SET IDENTITY\_INSERT PatientVisitTrackj ON;

INSERT INTO PatientVisitTrackj (VisitID, PatientLastFourOfSSN, CareGiverLName, VisitDate, RoomNumber, ReasonOfVisit) VALUES

(1, 0841, 'Nelson', convert(date,'2019-12-15'), 12, 'Patient had a headache'),

(2, 3721, 'Senat', convert(date,'2020-03-27'), 14, 'Patient had bellyache'),

(3, 9779, 'Estime', convert(date,'2020-08-08'), 18, 'Patient had vaginal problem'),

(4, 6421, 'Charles', convert(date,'2020-09-06'), 02, 'Patient had vaginal issues'),

(5, 4327, 'Grough', convert(date,'2020-10-29'), 07, 'Patient had a lung problem'),

(6, 2121, 'Auguste', convert(date,'2020-12-12'), 11, 'Patient had difficulty breathing'),

(7, 3457, 'Joseph', convert(date,'2021-01-29'), 19, 'Patient had pregnancy discomfort'),

(8, 8442, 'Romain', convert(date,'2021-03-04'), 01, 'Patient was here for delivery'),

(9, 1632, 'Senat', convert(date,'2021-03-17'), 05, 'Patient had a headache'),

(10,5319, 'Auguste', convert(date,'2021-04-13'), 03, 'Patient had stomach issue');

SET IDENTITY\_INSERT PatientVisitTrackj OFF;

SET IDENTITY\_INSERT Billingj ON;

INSERT INTO Billingj (InsuranceID, VisitID, Charge, Payment, BillingDate) VALUES

(1, 3, 785, 613, '20200822'),

(2, 4, 1230, 1124, '20200911'),

(3, 6, 420, 420, '20201215'),

(4, 7, 785, 785, '20210202'),

(5, 9, 672, 518, '20210325'),

(6, 1, 489, 357, '20191218'),

(7, 10, 1532, 1532, '20210418'),

(8, 2, 1017, 1017, '20200330'),

(9, 5, 1785, 1613, '20201101'),

(10, 8, 752, 698, '20210306');

SET IDENTITY\_INSERT Billingj OFF;

SET IDENTITY\_INSERT Payrollj ON;

INSERT INTO Payrollj (PaycheckID, CareGiverID, WeeklyTotalHours, WeeklyPayment) VALUES

(1, 003, 36, 1500),

(2, 002, 30, 1494),

(3, 001, 32, 15130),

(4, 004, 34, 1501),

(5, 005, 36, 1500),

(6, 006, 30, 1494),

(7, 007, 32, 1513),

(8, 008, 34, 1501);

SET IDENTITY\_INSERT Payrollj OFF;

SET IDENTITY\_INSERT PatientCareGiversja ON;

INSERT INTO PatientCareGiversja (PatientLastFourOfSSN, CareGiverID) VALUES

(0841, 001),

(3721, 002),

(9779, 003),

(6421, 004),

(4327, 005),

(2121, 006),

(3457, 007),

(8442, 008),

(1632, 009),

(5319, 010);

SET IDENTITY\_INSERT PatientCareGiversja OFF;

**VIEWS FOR EACH TABLE**

CREATE VIEW PatientView

AS

SELECT FirstName, LastName, age, gender

FROM Patientj;

CREATE VIEW CareView

AS

SELECT FName, LName, Position, department

FROM CareGiversj;

CREATE VIEW PatientVisitView

AS

SELECT VisitDate, CareGiverLName, RoomNumber, ReasonOfVisit

FROM PatientVisitTrackj;

CREATE VIEW BillingjView

AS

SELECT Charge, Payment, BillingDate

FROM Billingj;

CREATE VIEW PayrollView

AS

SELECT WeeklyTotalHours, WeeklyPayment

FROM Payrollj;

**VIEW CREATED WITH JOIN**

CREATE VIEW WITHJOIN

AS

SELECT FirstName, age, VisitDate

FROM Patientj JOIN PatientVisitTrackj ON Patientj.PatientLastFourOfSSN = PatientVisitTrackj.PatientLastFourOfSSN ;

**QUERRIES WITH CALCULATIONS AND ALIASES**

select Charge - Payment AS BalanceDue

from Billingj

USE F;

SELECT CareGiverLName, Count(\*) AS Indice,

AVG(Charge) AS AvgCharge

FROM Billingj JOIN PatientVisitTrackj

ON Billingj.VisitID = PatientVisitTrackj.VisitID

GROUP BY CareGiverLName

HAVING AVG(Charge) > 800;

**FUNCTION CREATED**

USE F;

CREATE FUNCTION BalanceDue

RETURN (MONEY)

BEGIN(

RETURN (SELECT SUM (Charge - Payment)

FROM Billingj

WHERE Charge - Payment > 900 )

END;