**//Creating table for role of the person in hospital**

create table Roles

(

role\_id int auto\_increment primary key,

role\_name varchar(50) not null,

check(role\_name in('Doctor','Nurse','Receptionist'))

);

**//creating table for user with credentials that for specific role**

create table Users

(

user\_id int auto\_increment primary key,

user\_name varchar(50) not null,

pass varchar(50) not null,

role\_id int not null,

foreign key(role\_id) references Roles(role\_id)

);

**// creating table for doctors**

create table Doctors

(

doctor\_id int auto\_increment primary key,

first\_name varchar(50) not null,

last\_name varchar(50) not null,

speciality varchar(50) not null,

phone decimal(10) not null,

user\_id int not null,

foreign key(user\_id) references Users(user\_id) on delete cascade,

check(phone>999999999 and phone<10000000000)

)

**// creating table for receptionist**

create table Receptionist

(

receptionist\_id int auto\_increment primary key,

receptionist\_name varchar(50) not null,

user\_id int not null,

foreign key(user\_id) references Users(user\_id) on delete cascade

);

**// creating table for nurses**

create table Nurses

(

nurse\_id int auto\_increment primary key,

nurse\_name varchar(50) not null,

nurse\_address varchar(50),

phone\_num decimal(10) not null,

user\_id int not null,

foreign key(user\_id) references Users(user\_id) on delete cascade,

check(phone\_num>999999999 and phone\_num<10000000000)

);

**// creating table for patients**

create table Patients

(

patient\_id int auto\_increment primary key,

first\_name varchar(50) not null,

last\_name varchar(50) not null,

date\_of\_birth date not null,

adhar\_num decimal(12) unique,

symptoms varchar(100) not null,

gender varchar(10) not null,

phone\_number decimal(10) not null,

insurance\_limit int not null,

total\_bill decimal(10,2) default 0.00,

receptionist\_id int not null,

nurse\_id int not null,

foreign key(nurse\_id) references Nurses(nurse\_id),

foreign key(receptionist\_id) references Receptionist(receptionist\_id),

check(insurance\_limit>=0),

check(gender in('male','female','other')),

check(adhar\_num>100000000000 and adhar\_num<999999999999),

check(phone\_number>999999999 and phone\_number<10000000000)

);

**// creating table of appointment for patient**

create table Appointments

(

appointment\_id int auto\_increment primary key,

patient\_id int not null,

doctor\_id int not null,

appointment\_date\_time datetime not null,

status varchar(5) not null,

check(status in('free','busy')),

foreign key(patient\_id) references Patients(patient\_id),

foreign key(doctor\_id) references Doctors(doctor\_id)

);

**// creating table of diagnosis**

create table Diagnosis

(

diagnosis\_id int auto\_increment primary key,

patient\_id int not null,

appointment\_id int not null,

diagnosis\_date date not null,

diagnosis\_details text not null,

prescription varchar(100),

foreign key(patient\_id) references Patients(patient\_id),

foreign key(appointment\_id) references Appointments(appointment\_id)

);

**// creating table for bill**

create table Bill

(

bill\_id int auto\_increment primary key,

patient\_id int not null,

bill\_amount decimal(10,2) not null,

bill\_date date not null,

foreign key(patient\_id) references Patients(patient\_id)

);

**//creating view for patient info with user**

create view PatientInfo as

select

Patients.patient\_id,

Patients.first\_name,

Patients.last\_name,

Patients.adhar\_num,

Patients.date\_of\_birth,

Patients.gender,

Receptionist.receptionist\_id as Registerd\_By

from Patients

join Receptionist on Patients.receptionist\_id= Receptionist.receptionist\_id;

**// creating index for patient table on last-name of patient**

create index Index\_on\_Patient\_LastName on Patients(last\_name);

**// creating index for bill table on patient id**

create index Index\_on\_Bill\_Patient\_Id on Bill(patient\_id);

**// creating procedure to generate bill for specific patient**

DELIMITER //

create procedure Generate\_Bill(in patientID int)

begin

declare total\_bill decimal(10,2);

select SUM(bill\_amount) into total\_bill

from Bill

where patient\_id = patientID;

update Patients

set total\_bill = total\_bill

where patient\_id = patientID;

end //

DELIMITER ;

**// creating trigger to check whether the insurance for patient is expired**

DELIMITER //

create trigger Check\_Insurance\_Expiry

before insert on Diagnosis

for each row

begin

if new.diagnosis\_date > (select date\_add(date\_of\_birth, interval insurance\_limit year) from Patients where patient\_id = new.patient\_id) then

signal sqlstate '45000' set message\_text = 'Insurance Limit Expired..!';

end if;

end //

DELIMITER ;

**//creating trigger to check alredy registerd patient**

DELIMITER //

create trigger Check\_Registered\_Patient

before insert on Patients

for each row

begin

if new.adhar\_num = any(select adhar\_num from Patients) then

signal sqlstate '45000' set message\_text = 'Patient alredy rgistered..!';

end if;

end //

DELIMITER ;

drop table Patients;

drop table Doctors;

drop table Appointments;

drop table Diagnosis;

drop table Nurses;

drop table Receptionist;

drop table Roles;

drop table Users;

drop table Bill;

select \*from Doctors;

**// inserting data into Roles table**

insert into Roles(role\_name) values ('Doctor');

insert into Roles(role\_name) values ('Nurse');

insert into Roles(role\_name) values ('Receptionist');

**// inserting data into Users table**

insert into Users(user\_name,pass,role\_id) values('Doc\_1','123',1);

insert into Users(user\_name,pass,role\_id) values('Doc\_2','123',1);

insert into Users(user\_name,pass,role\_id) values('Nur\_1','123',2);

insert into Users(user\_name,pass,role\_id) values('Nur\_2','123',2);

insert into Users(user\_name,pass,role\_id) values('Rec\_1','123',3);

insert into Users(user\_name,pass,role\_id) values('Rec\_2','123',3);

**// inserting data in Doctors table**

insert into Doctors(first\_name,last\_name,speciality,phone,user\_id) values('Sudhir','Desai','Eye Specialist',7057271796,1);

insert into Doctors(first\_name,last\_name,speciality,phone,user\_id) values('Vikrant','Madkari','Dentist',7020298816,2);

**//inserting data for Nurses**

insert into Nurses(nurse\_name,nurse\_address,phone\_num,user\_id) values('Susmita','Gadhinglaj',1203005640,3);

insert into Nurses(nurse\_name,nurse\_address,phone\_num,user\_id) values('Asmita','Nool',1020304050,4);

**//inserting data into Receptionist table**

insert into Receptionist(receptionist\_name,user\_id) value('Sarang',5);

insert into Receptionist(receptionist\_name,user\_id) value('Sarada',6);

**//inserting data for Patients**

insert into Patients(first\_name,last\_name,date\_of\_birth,adhar\_num,symptoms,gender,phone\_number,insurance\_limit,nurse\_id,receptionist\_id) values('Ramesh','Janawade','2002-07-01',583547762003,'cough','male',7276774873,40,1,1);

insert into Patients(first\_name,last\_name,date\_of\_birth,adhar\_num,symptoms,gender,phone\_number,insurance\_limit,nurse\_id,receptionist\_id) values('Shivraj','Kanade','1998-07-21',112233445566,'cold','male',9020298816,30,2,2);

insert into Patients(first\_name,last\_name,date\_of\_birth,adhar\_num,symptoms,gender,phone\_number,insurance\_limit,nurse\_id,receptionist\_id) values('Kiran','Sabale','1981-09-05',102030405060,'headache','female',9730083826,60,1,2);

**//inserting data into Appointment table**

insert into Appointments(appointment\_date\_time,status,patient\_id,doctor\_id) values('2024-01-10 01:10:30','free',5,1);

insert into Appointments(appointment\_date\_time,status,patient\_id,doctor\_id) values('2024-02-20 11:20:30','free',6,2);

**//Adding diagnosis data for patient**

insert into Diagnosis(diagnosis\_date,diagnosis\_details,prescription,patient\_id,appointment\_id) value('2024-01-10','Regular checkup','painkiller',5,5);

insert into Diagnosis(diagnosis\_date,diagnosis\_details,prescription,patient\_id,appointment\_id) value('2024-02-20','Regular checkup','dolo',6,6);

**//inserting data into Bill table**

insert into Bill(patient\_id, bill\_amount, bill\_date) values(5, 500,'2024-01-10');

insert into Bill(patient\_id, bill\_amount, bill\_date) values(5, 500,'2024-02-20');

insert into Bill(patient\_id, bill\_amount, bill\_date) values(6, 00,'2024-01-10');

insert into Bill(patient\_id, bill\_amount, bill\_date) values(6, 100,'2024-02-20');