create table physician (

eid integer primary key,

name varchar(25) NOT NULL,

position varchar(40) NOT NULL,

);

insert into physician values(1,'John Dorian','Staff Internist');

insert into physician values(2,'Elliot Reid','Attending Physician');

insert into physician values(3,'Christopher Turk','Surgical Attending Physician');

insert into physician values(4,'Percival Cox','Senior Attending Physician');

insert into physician values(5,'Bob Kelso','Head Chief of Medicine');

insert into physician values(6,'Todd Quinlan','Surgical Attending Physician');

insert into physician values(7,'John Wen','Surgical Attending Physician');

insert into physician values(8,'Keith Dudemeister','MD Resident');

insert into physician values(9,'Molly Clock','Attending Psychiatrist');

create table department (

did integer primary key,

name varchar(20) not null,

head integer not null

constraint fk\_department\_physician references physician

);

insert into Department values(1,'General Medicine',4);

insert into Department values(2,'Surgery',7);

insert into Department values(3,'Psychiatry',9);

insert into department values(4,'Pediatric',3)

create table works\_in (

physician integer

constraint fk\_works\_in\_physician references physician,

department integer NOT NULL

constraint fk\_works\_in\_department references department,

primary key(physician, department)

);

insert into works\_in values(1,1);

insert into works\_in values(2,1);

insert into works\_in values(3,1);

insert into works\_in values(3,2);

insert into works\_in values(4,1);

insert into works\_in values(5,1);

insert into works\_in values(6,2);

insert into works\_in values(7,1);

insert into works\_in values(7,2);

insert into works\_in values(8,1);

insert into works\_in values(9,3)

create table patient (

pid integer primary key,

name varchar(25) not null,

address varchar(30) not null,

phone char(10) not null,

insuranceID integer,

);

insert into patient values(100000001,'John Smith','42 Foobar Lane','0775550256',68476213);

insert into patient values(100000002,'Grace Ritchie','37 Snafu Drive','0765550512',36546321);

insert into patient values(100000003,'Random J. Patient','101 Omgbbq Street','0715551204',65465421);

insert into patient values(100000004,'Dennis Doe','1100 Foobaz Avenue','0785552048',68421879);

create table appointment (

appointmentId integer primary key,

patient integer not null

constraint fk\_appointment\_patient references patient,

physician integer not null

constraint fk\_appointment\_physician references physician,

startTime datetime not null,

endTime datetime not null,

room char(4) not null

);

insert into appointment values(13216584,100000001,1,'2014-01-24 10:00','2014-01-24 11:00','A201');

insert into appointment values(26548913,100000002,2,'2014-04-24 10:00','2014-04-24 11:00','B101');

insert into appointment values(36549879,100000001,1,'2014-04-25 10:00','2014-04-25 11:00','A201');

insert into appointment values(46846589,100000004,4,'2014-03-25 10:00','2014-04-25 11:00','B085');

insert into appointment values(59871321,100000004,4,'2015-04-26 10:00','2015-04-26 11:00','C100');

insert into appointment values(69879231,100000003,2,'2015-04-26 11:00','2015-04-26 12:00','C101');

insert into appointment values(76983231,100000001,3,'2015-04-26 12:00','2015-04-26 13:00','C100');

insert into appointment values(86213939,100000004,9,'2015-04-27 10:00','2015-04-21 11:00','A105');

insert into appointment values(93216548,100000002,2,'2015-04-27 10:00','2015-04-27 11:00','B100');

create table drugs (

code integer primary key,

name varchar(25) not null,

brand varchar(20) not null,

);

insert into drugs values(1,'Procrastin-X','X');

insert into drugs values(2,'Thesisin','Harcourts Labs');

insert into drugs values(3,'Awakin','Bar Laboratories');

insert into drugs values(4,'Crescavitin','Baz Industries');

insert into drugs values(5,'Melioraurin','SM Pharmaceuticals');

create table prescribes (

physician integer

constraint fk\_prescribes\_physician references physician,

patient integer

constraint fk\_prescribes\_patient references patient,

drug integer

constraint fk\_prescribes\_drug references drugs,

date datetime not null,

appointment integer

constraint fk\_prescribes\_appointment references appointment,

dose integer,

primary key(physician, patient, drug, date)

);

insert into prescribes values(1,100000001,1,'2008-04-24 10:47',13216584,5);

insert into prescribes values(9,100000004,2,'2008-04-27 10:53',86213939,10);

insert into prescribes values(9,100000004,2,'2008-04-30 16:53',NULL,5)

drop table department

drop table physician

drop table prescribes

drop table drugs

drop table appointment

drop table patient

drop table works\_in

--1--

CREATE VIEW appDetails(Room,Period)

AS

select a.room,

DATEDIFF(HH, a.startTime, a.endTime)

FROM appointment a

SELECT \* FROM appDetails

--2---

CREATE VIEW Details (PhyName, PhyPosition, DeptName, TotalApp)

AS

SELECT p.name, p.position, d.name, COUNT(a.appointmentId)

FROM physician p, department d, appointment a, works\_in w

WHERE p.eid = w.physician AND d.did = w.department

AND a.physician = p.eid

GROUP BY p.name, p.position, d.name

SELECT \* FROM Details

--3--

CREATE TRIGGER Check\_appointment

ON appointment

FOR insert, update

AS

BEGIN

Declare @phy int, @count int, @date date

SELECT @phy = physician, @date = CAST(StartTime as date)

FROM inserted

SELECT @count = COUNT(a.appointmentId)

FROM appointment a

WHERE a.physician = @phy AND CAST(startTime as date) = @date

IF @count > 3

ROLLBACK TRANSACTION

END

--4--

CREATE TRIGGER Check\_Drug

ON prescribes

FOR insert, update

AS

BEGIN

Declare @pat int, @drug int, @count int

SELECT @pat = patient, @drug = drug

FROM inserted

SELECT @count = count(\*)

FROM prescribes

Where patient = @pat AND drug = @drug

if @count > 2

ROLLBACK TRANSACTION

END