-- Blood Bank Donation Database Management System

-- Creation of 'Bloodbank' database CREATE DATABASE BLOODBANK;

USE BLOODBANK;

-- Creation of 'BB\_Manager' table CREATE TABLE BB\_Manager (

M\_id int NOT NULL PRIMARY KEY,

mName varchar(100) NOT NULL, m\_phNo bigint

);

-- Value insertion INSERT into BB\_Manager

VALUES (101, 'Vatsalya', 9693959671),

(102, 'Vicky', 9693959672),

(103, 'Light', 9693959673),

(104, 'Eren', 9693959674),

(105, 'Mikasa', 9693959675),

(106, 'Goku', 9693959676),

(107, 'Itachi', 9693959677),

(108, 'Naruto', 9693959678),

(109, 'Luffy', 9693959679),

(110, 'Levi', 9693959680);

-- Display table select \*

from BB\_Manager;

-- Creation of 'Recording\_Staff' table CREATE TABLE Recording\_Staff (

reco\_ID int NOT NULL PRIMARY KEY,

reco\_Name varchar(100) NOT NULL, reco\_phNo bigint

);

-- Value insertion

INSERT into Recording\_Staff

VALUES (101012, 'Tanjiro', 4044846553),

(101112, 'Zenitsu', 4045856553),

(101212, 'Inosuke', 4045806553),

(101312, 'Mitsuri', 4045806553),

(101412, 'Nezuko', 4045806553),

(101512, 'Muzan', 4045806553),

(101612, 'Akaza', 4045806553),

(101712, 'Tengen', 4045816553),

(101812, 'Rengoku', 4045826553),

(101912, 'Kokushibo', 4045836553);

-- Display table select \*

from Recording\_Staff;

-- Creation of 'City' table CREATE TABLE City (

City\_ID int NOT NULL PRIMARY KEY,

City\_name varchar(100) NOT NULL

);

-- Value insertion INSERT into City

VALUES (1100, 'Asgard'),

(1200, 'Paradis'),

(1300, 'Marley'),

(1400, 'Wakanda'),

(1500, 'Valhalla'),

(1600, 'Madripoor'),

(1700, 'Hogwarts'),

(1800, 'Sokovia'),

(1900, 'Kamar-Taj'),

(2000, 'Gotham');

-- Display table select \*

from City;

-- Creation of 'Blood\_Donor' table CREATE TABLE Blood\_Donor (

bd\_ID int NOT NULL PRIMARY KEY,

bd\_name varchar(100) NOT NULL, bd\_age varchar(100),

bd\_sex varchar(100), bd\_Bgroup varchar(10), bd\_reg\_date date, reco\_ID int NOT NULL, City\_ID int NOT NULL,

FOREIGN KEY(reco\_ID) REFERENCES Recording\_Staff(reco\_ID), FOREIGN KEY(City\_ID) REFERENCES City(City\_ID)

);

-- Value insertion INSERT into Blood\_Donor VALUES (

150011,

'Steven', 25,

'M',

'O+',

'2015-07-19',

101412,

1100

), (

150012,

'Tony',

35, 'M',

'A-',

'2015-12-24',

101412,

1100

), (

150013,

'Bruce', 22,

'M',

'AB+',

'2015-08-28',

101212,

1200

), (

150014,

'Natasha', 29,

'M',

'B+',

'2015-12-17',

101212,

1300

), (

150015,

'Hermoine', 42,

'M',

'A+',

'2016-11-22',

101212,

1300

), (

150016,

'Harry', 44,

'F',

'AB-',

'2016-02-06',

101212,

1200

), (

150017,

'Sherlock', 33,

'M',

'B-',

'2016-10-15',

101312,

1400

), (

150018,

'Logan', 31,

'F',

'O+',

'2016-01-04',

101312,

1200

), (

150019,

'Peter', 24,

'F',

'AB+',

'2016-09-10',

101312,

1500

), (

150020,

'Odinson', 29,

'M',

'O-',

'2016-12-17',

101212,

1200

);

-- Display table select \*

from Blood\_Donor;

-- Creation of 'DiseaseFinder' table CREATE TABLE DiseaseFinder (

dfind\_ID int NOT NULL PRIMARY KEY, dfind\_name varchar(100) NOT NULL, dfind\_PhNo bigint

);

-- Value insertion

INSERT into DiseaseFinder

VALUES (11, 'Indiana', 9693959681),

(12, 'Stephen', 9693959682),

(13, 'Christine', 9693959683),

(14, 'Gwen', 9693959672),

(15, 'Viktor', 9693959679),

(16, 'Skywalker', 9693959684),

(17, 'Julius', 9693959685),

(18, 'Kratos', 9693959686),

(19, 'Brutus', 9693959687),

(20, 'Murdock', 9693959688);

-- Display table select \*

from DiseaseFinder;

-- Creation of 'BloodSpecimen' table CREATE TABLE BloodSpecimen (

specimen\_number int NOT NULL, b\_group varchar(10) NOT NULL, status int,

dfind\_ID int NOT NULL, M\_id int NOT NULL,

primary key (specimen\_number, b\_group), FOREIGN KEY(M\_id) REFERENCES BB\_Manager(M\_id),

FOREIGN KEY(dfind\_ID) REFERENCES DiseaseFinder(dfind\_ID)

);

-- Value insertion

INSERT into BloodSpecimen VALUES (1001, 'B+', 1, 11, 101),

(1002, 'O+', 1, 12, 102),

(1003, 'AB+', 1, 11, 102),

(1004, 'O-', 1, 13, 103),

(1005, 'A+', 0, 14, 101),

(1006, 'A-', 1, 13, 104),

(1007, 'AB-', 1, 15, 104),

(1008, 'AB-', 0, 11, 105),

(1009, 'B+', 1, 13, 105),

(1010, 'O+', 0, 12, 105),

(1011, 'O+', 1, 13, 103),

(1012, 'O-', 1, 14, 102),

(1013, 'B-', 1, 14, 102),

(1014, 'AB+', 0, 15, 101);

-- Display table Select \*

from BloodSpecimen;

-- Creation of 'Hospital\_Info\_1' table CREATE TABLE Hospital\_Info\_1 (

hosp\_ID int NOT NULL,

hosp\_name varchar(100) NOT NULL, City\_ID int NOT NULL,

M\_id int NOT NULL, primary key(hosp\_ID),

FOREIGN KEY(M\_id) REFERENCES BB\_Manager(M\_id), FOREIGN KEY(City\_ID) REFERENCES City(City\_ID)

);

-- Value insertion

INSERT into Hospital\_Info\_1

VALUES (1, 'Springfield', 1100, 101),

(2, 'Hampshire', 1200, 103),

(3, 'Winterfell', 1300, 103),

(4, 'Riverrun', 1400, 104),

(5, 'Hogsmeade', 1800, 103),

(6, 'Greenoaks', 1300, 106),

(7, 'Forestpark', 1300, 102),

(8, 'Parkland', 1200, 106),

(9, 'Pinecreek', 1500, 109),

(10, 'Alphaville', 1700, 105);

-- Display table select \*

from Hospital\_Info\_1;

-- Creation of 'Hospital\_Info\_2' table CREATE TABLE Hospital\_Info\_2 (

hosp\_ID int NOT NULL,

hosp\_name varchar(100) NOT NULL, hosp\_needed\_Bgrp varchar(10), hosp\_needed\_qnty int,

primary key(hosp\_ID, hosp\_needed\_Bgrp)

);

-- Value insertion

INSERT into Hospital\_Info\_2

VALUES (1, 'Springfield', 'A+', 20),

(1, 'Springfield', 'A-', 0),

(1, 'Springfield', 'AB+', 40),

(1, 'Springfield', 'AB-', 10),

(1, 'Springfield', 'B-', 20),

(2, 'Hampshire', 'A+', 40),

(2, 'Hampshire', 'AB+', 20),

(2, 'Hampshire', 'A-', 10),

(2, 'Hampshire', 'B-', 30),

(2, 'Hampshire', 'B+', 0),

(2, 'Hampshire', 'AB-', 10),

(3, 'Winterfell', 'A+', 0),

(3, 'Winterfell', 'AB+', 0),

(3, 'Winterfell', 'A-', 0),

(3, 'Winterfell', 'B-', 20),

(3, 'Winterfell', 'B+', 10),

(3, 'Winterfell', 'AB-', 0),

(4, 'Riverrun', 'A+', 10),

(4, 'Riverrun', 'A-', 40),

(7, 'Forestpark', 'B-', 40),

(8, 'Parkland', 'B+', 10),

(9, 'Pinecreek', 'AB-', 20);

-- Display table select \*

from Hospital\_Info\_2;

-- Creation of 'Recipient' table CREATE TABLE Recipient (

reci\_ID int NOT NULL PRIMARY kEY, reci\_name varchar(100) NOT NULL, reci\_age varchar(10),

reci\_Brgp varchar(100), reci\_Bqnty float, reco\_ID int NOT NULL, City\_ID int NOT NULL, M\_id int NOT NULL,

FOREIGN KEY(M\_id) REFERENCES BB\_Manager(M\_id), FOREIGN KEY(City\_ID) REFERENCES City(City\_ID)

);

Alter table Recipient

ADD reci\_sex varchar(100); Alter table Recipient

ADD reci\_reg\_date date;

-- Value insertion INSERT into Recipient VALUES (

10001,

'Indiana', 25,

'B+', 1.5,

101212,

1100,

101, 'F',

'2015-12-17'

), (

10002,

'Bruce', 60, 'A+',

1,

101312,

1100,

102, 'M',

'2015-12-16'

), (

10003,

'Goku', 35, 'AB+', 0.5,

101312,

1200,

102, 'M',

'2015-10-17'

), (

10004,

'Stephen', 66,

'B+', 1,

101212,

1300,

104, 'M',

'2016-11-17'

), (

10005,

'Itachi', 53,

'B-', 1,

101412,

1400,

105, 'M',

'2015-04-17'

), (

10006,

'Erwin', 45, 'O+', 1.5,

101512,

1500,

105, 'M',

'2015-12-17'

), (

10007,

'Natasha', 22,

'AB-', 1,

101212,

1500,

101, 'M',

'2015-05-17'

), (

10008,

'Julius', 25,

'B+', 2,

101412,

1300,

103, 'F',

'2015-12-14'

), (

10009,

'Hemsworth', 30,

'A+', 1.5,

101312,

1100,

104, 'M',

'2015-02-16'

), (

10010,

'Langford', 25,

'AB+', 3.5,

101212,

1200,

107, 'F',

'2016-10-17'

);

-- Display table select \*

from Recipient;

-- SAMPLE SQL QUERIES

-- Query 1

CREATE VIEW Blood\_Recipient\_SameBGrp AS select Blood\_Donor.bd\_name,

Recipient.reci\_name, reco\_Name

from Recording\_Staff

inner join Blood\_Donor on Recording\_Staff.reco\_ID = Blood\_Donor.reco\_ID inner join Recipient on Recording\_Staff.reco\_ID = Recipient.reco\_ID

where Blood\_Donor.bd\_Bgroup = Recipient.reci\_Brgp

and Blood\_Donor.bd\_reg\_date = Recipient.reci\_reg\_date; select \*

from Blood\_Recipient\_SameBGrp;

-- Query 2

Select specimen\_number, b\_group

from BloodSpecimen, DiseaseFinder

WHERE BloodSpecimen.dfind\_ID = DiseaseFinder.dfind\_ID AND dfind\_name = 'Gwen'

AND status = 1;

-- Query 3

select BB\_Manager.M\_id, mName, Recipient.reci\_name, Recipient.reci\_Brgp,

BloodSpecimen.b\_group from BB\_Manager,

Recipient,

BloodSpecimen

where Recipient.M\_id = BloodSpecimen.M\_id

and Recipient.reci\_Brgp = BloodSpecimen.b\_group and Recipient.M\_id = BB\_Manager.M\_id

and status = 1;

-- Query 4 Select bd\_ID,

bd\_name, reci\_ID, reci\_name

FROM Blood\_Donor, Recipient

WHERE bd\_Bgroup = reci\_Brgp

AND Blood\_Donor.City\_ID = Recipient.City\_ID;

-- Query 5 Select hosp\_ID,

hosp\_name, City\_ID,

HOspital\_Info\_1.M\_id from Hospital\_Info\_1,

BB\_Manager

where BB\_Manager.M\_id = Hospital\_Info\_1.M\_id and BB\_Manager.M\_id = 103;