-- Student name, Student NO

-- Jay Ganguli, 1001575191

-- Sayantan Chattopadhyay, 1000818145

CREATE TABLE Person

(

pid INTEGER NOT NULL,

firstName VARCHAR(20),

LastName VARCHAR(20),

gender VARCHAR(10),

birthdate DATE,

Occupation VARCHAR(30),

PRIMARY KEY (pid)

);

CREATE TABLE Phones

(

phoneNO VARCHAR(20),

PRIMARY KEY (phoneNO)

);

CREATE TABLE Addresses

(

street VARCHAR(100),

city VARCHAR(30),

province VARCHAR(20)

);

CREATE TABLE Fares

(

passType VARCHAR(20),

fare DOUBLE,

PRIMARY KEY (passType)

);

CREATE TABLE Routes

(

rid INTEGER NOT NULL,

rname VARCHAR(30),

PRIMARY KEY (rid)

);

CREATE TABLE Stops

(

sid INTEGER NOT NULL,

sname VARCHAR(30),

PRIMARY KEY (sid)

);

CREATE TABLE Sites

(

siteName VARCHAR(50),

capacity INTEGER NOT NULL,

category VARCHAR(20)

);

CREATE TABLE Events

(

eName VARCHAR(30),

aDate DATE,

eTime TIME,

participants INTEGER

);

CREATE TABLE HasPhone

(

pid INTEGER NOT NULL,

phoneNO VARCHAR(20),

FOREIGN KEY (pid) REFERENCES Person(pid),

FOREIGN KEY (phoneNO) REFERENCES Phones(phoneNO)

);

CREATE TABLE HasAddr

(

pid INTEGER NOT NULL,

street VARCHAR(100),

city VARCHAR(30),

province VARCHAR(20),

PRIMARY KEY (pid),

FOREIGN KEY (pid) REFERENCES Person(pid)

);

CREATE TABLE SitePhone

(

siteName VARCHAR(50),

phoneNO VARCHAR(20),

PRIMARY KEY (siteName, phoneNO),

FOREIGN KEY (phoneNO) REFERENCES Phones(phoneNO)

);

CREATE TABLE SiteAddr

(

siteName VARCHAR(50),

street VARCHAR(100),

city VARCHAR(30),

province VARCHAR(20)

);

CREATE TABLE Passengers

(

pid INTEGER NOT NULL,

passType VARCHAR(20),

PRIMARY KEY (pid),

FOREIGN KEY (pid) REFERENCES Person(pid),

FOREIGN KEY (passType) REFERENCES Fares(passType)

);

CREATE TABLE Drivers

(

pid INTEGER NOT NULL,

salary REAL,

yrsOfService INTEGER,

PRIMARY KEY (pid),

FOREIGN KEY (pid) REFERENCES Person(pid)

);

CREATE TABLE Infractions

(

pid INTEGER NOT NULL,

iDate DATE,

infraction VARCHAR(20),

demerit INTEGER,

penalty VARCHAR(20),

PRIMARY KEY (pid, iDate),

FOREIGN KEY (pid) REFERENCES Drivers(pid)

);

CREATE TABLE Maintenance

(

pid INTEGER NOT NULL,

specialization VARCHAR(30),

level INTEGER,

yrsOfService INTEGER,

salary DOUBLE,

PRIMARY KEY (pid),

FOREIGN KEY (pid) REFERENCES Person(pid)

);

CREATE TABLE Buses

(

bid INTEGER NOT NULL,

yrsOperated INTEGER,

seats INTEGER,

manufacturer VARCHAR(50),

adRevenue DOUBLE,

fuel VARCHAR(20),

rid INTEGER NOT NULL,

PRIMARY KEY (bid),

FOREIGN KEY (rid) REFERENCES Routes(rid)

);

CREATE TABLE Fixes

(

pid INTEGER NOT NULL,

bid INTEGER NOT NULL,

iDate DATE,

FOREIGN KEY (pid) REFERENCES Maintenance(pid),

FOREIGN KEY (bid) REFERENCES Buses(bid)

);

CREATE TABLE ServesRoute

(

bid INTEGER NOT NULL,

rid INTEGER NOT NULL,

PRIMARY KEY (bid),

FOREIGN KEY (bid) REFERENCES Buses(bid),

FOREIGN KEY (rid) REFERENCES Routes(rid)

);

CREATE TABLE HasStops

(

route INTEGER NOT NULL,

stop INTEGER NOT NULL,

FOREIGN KEY (route) REFERENCES Routes(rid),

FOREIGN KEY (stop) REFERENCES Stops(sid)

);

CREATE TABLE Schedule

(

bid INTEGER NOT NULL,

rid INTEGER NOT NULL,

sid INTEGER NOT NULL,

arriveAt DATETIME,

PRIMARY KEY (bid, rid, sid),

FOREIGN KEY (bid) REFERENCES Buses(bid),

FOREIGN KEY (rid) REFERENCES Routes(rid),

FOREIGN KEY (sid) REFERENCES Stops(sid)

);

CREATE TABLE ServesSite

(

rid INTEGER NOT NULL,

siteName VARCHAR(50),

PRIMARY KEY (rid, siteName),

FOREIGN KEY (rid) REFERENCES Routes(rid)

);

CREATE TABLE ServesStop

(

sid INTEGER NOT NULL,

siteName VARCHAR(50),

PRIMARY KEY (sid, siteName),

FOREIGN KEY (sid) REFERENCES Stops(sid)

);

CREATE TABLE HoldsEvent

(

siteName VARCHAR(50),

eName VARCHAR(30),

PRIMARY KEY (eName)

);