CREATE TABLE Customer (

customerID VARCHAR(20) NOT NULL,

CONSTRAINT customer\_PK

PRIMARY KEY (customerID)

);

CREATE TABLE privateIndividual (

customerID VARCHAR(20) NOT NULL,

cFirstName VARCHAR(20) NOT NULL,

cLastName VARCHAR(20) NOT NULL,

mailingAddress VARCHAR(20) NOT NULL,

CONSTRAINT privateIndividual\_PK

PRIMARY KEY (customerID),

CONSTRAINT privateIndividual\_FK

FOREIGN KEY (customerID)

REFERENCES Customer(customerID)

);

CREATE TABLE corporateCustomer (

customerID VARCHAR(20) NOT NULL,

corporationName VARCHAR(20) NOT NULL,

CONSTRAINT corporateCustomer\_pk

PRIMARY KEY (corporationName,customerID),

CONSTRAINT corporateCustomer\_fk

FOREIGN KEY (customerID)

REFERENCES customer(customerID)

);

CREATE TABLE corporateAddress (

corporationID VARCHAR(20) NOT NULL,

addressType VARCHAR(20) NOT NULL,

addressField VARCHAR(20) NOT NULL,

CONSTRAINT corporateAddres\_PK

PRIMARY KEY (corporationName,addressType),

CONSTRAINT corporateAddress\_FK

FOREIGN KEY (corporationName)

REFERENCES corporateCustomer(corporationName)

);

CREATE TABLE activeCustomer (

customerID VARCHAR(20) NOT NULL,

referralPoints int,

CONSTRAINT activeCustomer\_PK

PRIMARY KEY (customerID),

CONSTRAINT activeCustomer\_FK

FOREIGN KEY (customerID)

REFERENCES Customer(customerID)

);

CREATE TABLE prospectiveCustomer (

customerID VARCHAR(20) NOT NULL,

pEmail VARCHAR(20) NOT NULL,

numContacts VARCHAR(20) NOT NULL,

isDead BOOLEAN,

lastContacted date,

CONSTRAINT prospectiveCustomer\_pk

PRIMARY KEY (customerID),

CONSTRAINT prospectiveCustomer\_fk

FOREIGN KEY (customerID)

REFERENCES Customer(customerID)

);

CREATE TABLE Referral (

referredID VARCHAR(20) NOT NULL,

referralDate date,

referringID VARCHAR(20) NOT NULL,

CONSTRAINT referral\_PK

PRIMARY KEY (referredID,referringID),

CONSTRAINT referral\_FK

FOREIGN KEY (referredID)

REFERENCES prospectiveCustomer(customerID),

CONSTRAINT referral

FOREIGN KEY(referringID)

REFERENCES activeCustomer(customerID)

);

CREATE TABLE steadyCustomer (

customerID VARCHAR(20) NOT NULL,

loyaltyPoints int,

sEMAIL VARCHAR(20) NOT NULL,

CONSTRAINT steadyCustomer\_pk

PRIMARY KEY (customerID),

CONSTRAINT steadyCustomer\_fk

FOREIGN KEY (customerID)

REFERENCES activeCustomer(customerID)

);

CREATE TABLE premierCustomer (

customerID VARCHAR(20) NOT NULL,

lastVisited date,

moneySpent float,

moneyifSteady boolean,

CONSTRAINT premierCustomer\_pk

PRIMARY KEY (customerID),

CONSTRAINT premierCustomer\_fk

FOREIGN KEY (customerID)

REFERENCES activeCustomer(customerID)

);

CREATE TABLE vehicle (

customerID VARCHAR(20) NOT NULL,

VIN VARCHAR(20) NOT NULL,

model VARCHAR(20) NOT NULL,

make VARCHAR(20) NOT NULL,

year VARCHAR(20) NOT NULL,

CONSTRAINT vehicle\_pk

PRIMARY KEY (VIN),

CONSTRAINT vehicle\_fk

FOREIGN KEY (customerID)

REFERENCES Customer(customerID),

CONSTRAINT vehicle\_fk2

FOREIGN KEY (model,make,year)

REFERENCES vehicleType(model,make,year)

);

CREATE TABLE vehicleType (

model VARCHAR(20) NOT NULL,

make VARCHAR(20) NOT NULL,

year VARCHAR(20) NOT NULL,

CONSTRAINT vehicleType\_pk

PRIMARY KEY (model, make, year)

);

CREATE TABLE vehiclePart (

model VARCHAR(20) NOT NULL,

make VARCHAR(20) NOT NULL,

year VARCHAR(20) NOT NULL,

UPC VARCHAR(20) NOT NULL,

CONSTRAINT vehiclePart\_PK

PRIMARY KEY (model, make, year, UPC),

CONSTRAINT vehiclePart\_FK

FOREIGN KEY (model, make, year)

REFERENCES vehicleType(model, make, year),

CONSTRAINT vehiclePart\_FK2

FOREIGN KEY (UPC)

REFERENCES part(UPC)

);

CREATE TABLE part (

partName VARCHAR(20) NOT NULL,

UPC VARCHAR(20) NOT NULL,

partPrice float,

CONSTRAINT part\_pk

PRIMARY KEY (UPC),

CONSTRAINT part\_fk

FOREIGN KEY(partName)

REFERENCES requiredPartType(partName)

);

CREATE TABLE requiredPartType(

partName VARCHAR(20) NOT NULL,

CONSTRAINT requirdPartType\_pk

PRIMARY KEY (partName)

);

CREATE TABLE serviceOrder(

technicianID varchar(20) NOT NULL,

VIN varchar(20) NOT NULL,

serviceOrderID varchar(20) NOT NULL,

sOrderDate date,

mileange int,

CONSTRAINT serviceOrder\_pk

PRIMARY KEY(serviceOrderID),

CONSTRAINT serviceOrder\_fk

FOREIGN KEY(technicianID)

REFERENCES serviceTechnician(eID),

CONSTRAINT serviceOrder\_fk2

FOREIGN KEY(VIN)

REFERENCES vehicle(VIN)

);

CREATE TABLE serviceOrderLine(

serviceOrderID varchar(20) NOT NULL,

UPC varchar(20) NOT NULL,

quantity int,

CONSTRAINT serviceOrderLine\_pk

PRIMARY KEY(serviceOrderID, UPC),

CONSTRAINT serviceOrderLine\_fk

FOREIGN KEY(serviceOrderID)

REFERENCES serviceOrder(serviceOrderID),

CONSTRAINT serviceOrderLine\_fk2

FOREIGN KEY(UPC)

REFERENCES part(UPC)

);

CREATE TABLE orderedService(

mechanicID varchar(20) NOT NULL,

serviceQuality varchar(20) NOT NULL,

salePrice float,

itemName varchar(20) NOT NULL,

serviceOrderID varchar(20) NOT NULL,

CONSTRAINT orderedService\_pk

PRIMARY KEY(itemName, serviceOrderID),

CONSTRAINT orderedService\_fk

FOREIGN KEY(mechanicID)

REFERENCES mechanic(eID),

CONSTRAINT orderedService\_fk2

FOREIGN KEY(serviceOrderID)

REFERENCES serviceOrder(serviceOrderID)

);

CREATE TABLE maintenanceItem(

itemName VARCHAR (20) NOT NULL,

itemPrice float,

CONSTRAINT maintenanceItem\_pk

PRIMARY KEY (itemName),

CONSTRAINT maintenanceItem\_fk

FOREIGN KEY (itemName)

REFERENCES orderedService(itemName)

);

CREATE TABLE maintenanceSkill(

itemName VARCHAR (20) NOT NULL,

skillName VARCHAR (20) NOT NULL,

CONSTRAINT mSkill\_pk

PRIMARY KEY (itemName,skillName),

CONSTRAINT mSkill\_fk1

FOREIGN KEY (itemName)

REFERENCES maintenanceItem(itemName),

CONSTRAINT mSkill\_fk2

FOREIGN KEY (skillName)

REFERENCES skill(skillName)

);

CREATE TABLE supplier(

sName VARCHAR (20) NOT NULL,

sAddress VARCHAR (20) NOT NULL,

sPhone VARCHAR (20) NOT NULL,

CONSTRAINT supplier\_pk

PRIMARY KEY (sName)

);

CREATE TABLE partOrder(

supplierName VARCHAR (20) NOT NULL,

orderID VARCHAR (20) NOT NULL,

pOrderDate date,

pTotalPRice float,

CONSTRAINT order\_pk

PRIMARY KEY (orderID),

CONSTRAINT order\_fk

FOREIGN KEY(supplierName)

REFERENCES supplier(sName)

);

CREATE TABLE partOrderLine(

orderID VARCHAR (20) NOT NULL,

UPC VARCHAR (20) NOT NULL,

quantity int,

unitPrice float,

CONSTRAINT partOrderLine\_PK

PRIMARY KEY (orderID,UPC),

CONSTRAINT partOrderLine\_FK

FOREIGN KEY(UPC)

REFERENCES part(UPC),

CONSTRAINT partOrderLine\_FK2

FOREIGN KEY(orderID)

REFERENCES partOrder(orderID)

);

CREATE TABLE maintenancePackage(

itemName VARCHAR(20) NOT NULL,

packagePrice float,

CONSTRAINT mp\_pk

PRIMARY KEY(itemName)

);

CREATE TABLE maintenancePart(

itemName VARCHAR(20) NOT NULL,

partName VARCHAR(20) NOT NULL,

CONSTRAINT mp\_pk

PRIMARY KEY(itemName,partName),

CONSTRAINT mp\_fk1

FOREIGN KEY(itemName)

REFERENCES maintenanceItem(itemName),

CONSTRAINT mp\_fk2

FOREIGN KEY(partName)

REFERENCES requiredPartType(partName)

);

CREATE TABLE packageItem(

itemName VARCHAR(20) NOT NULL,

packageName VARCHAR(20) NOT NULL,

itemSalePrice float,

maintenanceQuantity int,

CONSTRAINT packageItem\_pk

PRIMARY KEY(itemName),

CONSTRAINT packageItem\_fk1

FOREIGN KEY(itemName)

REFERENCES maintenanceItem(itemName),

CONSTRAINT packageItem\_fk2

FOREIGN KEY(packageName)

REFERENCES maintenancePackage(itemName)

);

CREATE TABLE employee(

eID varchar(20) NOT NULL,

eFirstName varchar(20) NOT NULL,

eLastName varchar(20) NOT NULL,

CONSTRAINT employee\_pk

PRIMARY KEY(eID)

);

CREATE TABLE serviceTechnician(

eID varchar(20) NOT NULL,

performance varchar(20) NOT NULL,

CONSTRAINT serviceTechnician\_pk

PRIMARY KEY(eID),

CONSTRAINT serviceTechnician\_fk

FOREIGN KEY(eID)

REFERENCES employee(eID)

);

CREATE TABLE mechanic(

eID varchar(20) NOT NULL,

yearsWorked int,

isAvailable boolean,

CONSTRAINT mechanic\_pk

PRIMARY KEY(eID),

CONSTRAINT mechnaic\_fk

FOREIGN KEY(eID)

REFERENCES employee(eID)

);

CREATE TABLE skill(

skillName VARCHAR(20) NOT NULL,

CONSTRAINT skill\_pk

PRIMARY KEY(skillName)

);

CREATE TABLE certification(

mechanicID VARCHAR(20) NOT NULL,

skillName VARCHAR(20) NOT NULL,

certificateName VARCHAR(20) NOT NULL,

accreditedBy VARCHAR(20) NOT NULL,

CONSTRAINT cert\_pk

PRIMARY KEY(mechanicID, skillName),

CONSTRAINT cert\_fk

FOREIGN KEY(skillName)

REFERENCES skill(skillName),

CONSTRAINT cert\_fk2

FOREIGN KEY(mechanicID)

REFERENCES mechanic(eID)

);

CREATE TABLE mentorship (

mentorID VARCHAR(20),

menteeID VARCHAR(20),

skillName VARCHAR(20),

startDate DATE,

CONSTRAINT mentorship\_pk

PRIMARY KEY (mentorID, menteeID, skillName),

CONSTRAINT mentorship\_fk1

FOREIGN KEY (mentorID)

REFERENCES mechanic (eID),

CONSTRAINT mentorship\_fk2

FOREIGN KEY (menteeID)

REFERENCES mechanic (eID),

CONSTRAINT mentorship\_fk3

FOREIGN KEY (skillName)

REFERENCES skill (skillName)

);

CREATE TABLE mentorPeriod (

mentorID VARCHAR(20),

menteeID VARCHAR(20),

startDate DATE,

endDate DATE,

CONSTRAINT mentorPeriod\_pk

PRIMARY KEY (mentorID, menteeID, startDate,endDate),

CONSTRAINT mentorPeriod\_fk

FOREIGN KEY (mentorID)

REFERENCES mentorship (mentorID),

CONSTRAINT mentorPeriod\_fk2

FOREIGN KEY (menteeID)

REFERENCES mentorship (menteeID)

);