---VehicleManufacturers

drop table VehicleManufacturers;

create table VehicleManufacturers(

vehicleManfId number(3),

manufacturerName char(50),

CONSTRAINT pk\_vehicleManfId PRIMARY KEY (vehicleManfId)

);

insert into VehicleManufacturers values(1, 'Honda');

insert into VehicleManufacturers values(2, 'Nissan');

insert into VehicleManufacturers values(3, 'Toyota');

insert into VehicleManufacturers values(4, 'Lexus');

insert into VehicleManufacturers values(5, 'Infiniti');

select \* from VehicleManufacturers;

---Services

drop table Services;

create table Services(

serviceId number(3) primary key,

name char(50)

);

insert into Services values(1, 'Belt Replacement');

insert into Services values(2, 'Engine Repair');

insert into Services values(3, 'Catalytic Converter Repair');

insert into Services values(4, 'Muffler Repair');

insert into Services values(5, 'Alternator Repair');

insert into Services values(6, 'Power Lock Repair');

insert into Services values(7, 'Axle Repair');

insert into Services values(8, 'Transmission Flush');

insert into Services values(9, 'Tire Balancing');

insert into Services values(10, 'Wheel Alignment');

insert into Services values(11, 'Compressor Repair');

insert into Services values(12, 'Compressor Repair');

insert into Services values(13, 'Oil Changes1');

insert into Services values(14, 'Brake Repair1');

insert into Services values(15, 'Check Engine Light Diagnostics1');

insert into Services values(16, 'Oil Changes2');

insert into Services values(17, 'Brake Repair2');

insert into Services values(18, 'Check Engine Light Diagnostics2');

insert into Services values(19, 'Oil Changes3');

insert into Services values(20, 'Brake Repair3');

insert into Services values(21, 'Check Engine Light Diagnostics3');

select \* from Services order by serviceId;

---RepairServices

drop table RepairServices;

create table RepairServices(

serviceId number(3) primary key,

category char(50),

constraint fk\_RepairServices\_Services foreign key (serviceId) references Services(serviceId)

);

insert into RepairServices values(1, 'Engin Services');

insert into RepairServices values(2, 'Engin Services');

insert into RepairServices values(3, 'Exhaust Services');

insert into RepairServices values(4, 'Exhaust Services');

insert into RepairServices values(5, 'Electrical Services');

insert into RepairServices values(6, 'Electrical Services');

insert into RepairServices values(7, 'Transmission Services');

insert into RepairServices values(8, 'Transmission Services');

insert into RepairServices values(9, 'Tire Services');

insert into RepairServices values(10, 'Tire Services');

insert into RepairServices values(11, 'Conditioner Services');

insert into RepairServices values(12, 'Conditioner Services');

---MaintenanceServices

drop table MaintenanceServices;

create table MaintenanceServices(

serviceId number(3) primary key,

constraint fk\_Maintenanceservices\_Services foreign key (serviceId) references Services(serviceId)

);

insert into MaintenanceServices values(13);

insert into MaintenanceServices values(14);

insert into MaintenanceServices values(15);

insert into MaintenanceServices values(16);

insert into MaintenanceServices values(17);

insert into MaintenanceServices values(18);

insert into MaintenanceServices values(19);

insert into MaintenanceServices values(20);

insert into MaintenanceServices values(21);

select \* from RepairServices m, Services s

where m.serviceId = s.serviceId;

select \* from MaintenanceServices m, Services s

where m.serviceId = s.serviceId;

---Roles

drop table Roles;

create table Roles(

roleType char(20) primary key

);

insert into Roles values('administrator');

insert into Roles values('manager');

insert into Roles values('receptionist');

insert into Roles values('mechanic');

select \* from Roles;

---Service Center

drop table ServiceCenters;

create table ServiceCenters(

centerId integer primary key,

minWage number(10, 2),

maxWage number(10, 2),

address varchar2(200),

phone char(15),

satOpen char(1)

);

insert into ServiceCenters values(1, 15.00, 200.00, '1234 main street, Raleigh 27614', '123-123-1234', '1');

select \* from ServiceCenters;

---Employees

drop table Employees;

create table Employees(

employeeId number(9) primary key,

centerId integer,

roleType char(20) not null,

username char(20),

password char(20),

firstName char(100),

lastName char(100),

email char(50),

phone char(15),

startDate date not null,

endDate date,

constraint fk\_Employees\_ServiceCenters foreign key (centerId) references ServiceCenters(centerId) on delete cascade,

constraint fk\_Employees\_Roles foreign key (roleType) references Roles(roleType)

);

create table Managers(

employeeId number(9) primary key,

salary number(10, 2),

constraint fk\_Managers\_Employees foreign key (employeeId) references Employees(employeeId) on delete cascade

);

create table Receptionists(

employeeId number(9) primary key,

salary number(10, 2),

constraint fk\_Receptionistss\_Employees foreign key (employeeId) references Employees(employeeId) on delete cascade

);

create table Mechanics(

employeeId number(9) primary key,

wage number(10, 2),

constraint fk\_Mechanics\_Employees foreign key (employeeId) references Employees(employeeId) on delete cascade

);

insert into Employees values(1, 1,'administrator', 'deanafranks', '1234567', 'Deana', 'Franks', 'dlfranks@ncsu.edu', '123-123-1234', '01-MAY-81', null);

insert into Employees values(2, 1,'manager', 'demoManager1', '1234567', 'Demo', 'Manager1', 'dlfranks@ncsu.edu', '123-123-1234', '01-MAY-81', null);

insert into Managers values(2, 500000.00);

select \* from Employees;

--Add managerId into the Service center. There is a curcular constraint flow issue between ServiceCenters and Employees because of the managerId.

alter table ServiceCenters add managerId number(9);

alter table ServiceCenters add constraint fk\_ServiceCenters\_Managers foreign key(managerId) references Managers(employeeId);

update ServiceCenters set managerId = 2 where centerId= 1;

select \* from ServiceCenters;

--The order of adding entities for setting up a service center

insert into ServiceCenters values(2, 20.00, 250.00, '567 Queen Street, Cary 23333', '456-456-9876', '0', null);

insert into Employees values(3, 2,'manager', 'demoManager2', '1234567', 'Demo', 'Manager2', 'dlfranks@ncsu.edu', '123-123-1234', '22-JUN-99', null);

insert into Managers values(3, 550000.00);

update ServiceCenters set managerId = 3 where centerId= 2;

---Vacations

create table Vacations(

vacationId integer primary key,

employeeId number(9) not null,

fromDate date,

toDate date,

constraint fk\_Vacations\_Mechanics foreign key (employeeId) references Mechanics(employeeId) On delete cascade

);

---Schedules

drop table Schedules;

create table Schedules(

scheduleId integer,

scheduleType char(1),

centerId integer,

price number(7, 2),

constraint pk\_Schedules primary key (scheduleId),

constraint fk\_Schedules\_ServiceCenters foreign key (centerId) references ServiceCenters(centerId)

);

---ScheduledServices

drop table ScheduledServices;

create table ScheduledServices(

scheduleId integer,

serviceId integer,

constraint fk\_ScheduledServices\_Schedules foreign key (scheduleId) references Schedules(scheduleId),

constraint fk\_ScheduledServices\_MaintenanceServices foreign key (serviceId) references MaintenanceServices(serviceId)

);

---Customers

drop table Customers;

create table Customers(

customerId integer primary key,

centerId integer,

firstName char(20),

lastName char(20),

address varchar(100),

status char(1),active char(1),

constraint fk\_Customer\_ServiceCenter foreign key(centerId) references ServiceCenters(centerId)

);

---CustomerVehicles

create table CustomerVehicles(

vin char(8) primary key,

customerId integer,

vehicleManfId integer,

mileage float,

year char (4),

class char(1),

constraint fk\_CustomerVehicles\_Customers foreign key (customerId) references Customers(customerid),

constraint fk\_CustomerVehicles\_VehicleManufacturers foreign key (vehicleManfId) references VehicleManufacturers(vehicleManfId)

);

---ServiceEvent to\_date('2022/09/23:12:00:00PM', 'yyyy/mm/dd:hh:mi:ssam'))

create table ServiceEvents(

eventId integer primary key,

vin char(8),

mechanicId number(9),

startDate date not null,

endDate date,

totalPrice number(10, 2),

totalPaid number(10, 2),

completed char (1),

constraint fk\_ServiceEvents\_CustomerVehicles foreign key (vin) references CustomerVehicles(vin ),

constraint fk\_ServiceEvents\_Employees foreign key (mechanicId) references Employees(employeeId)

);

---EventOnServices

drop table EventOnServices;

create table EventOnServices(

id integer primary key,

eventId integer,

serviceId integer,

serviceType char(20),

constraint fk\_EventOnServices\_ServiceEvents foreign key(eventId) references ServiceEvents(eventId),

constraint fk\_EventOnServices\_Services foreign key (serviceId) references Services(serviceId)

);

--Invoices

create table Invoices(

invoiceId integer primary key,

eventId integer,

serviceDate date not null,

totalPrice number(7, 2),

totalPaid number(7, 2),

status char(1),

constraint fk\_Invoices\_ServiceEvents foreign key (eventId) references ServiceEvents(eventId)

);

create table Serviced(

id integer primary key,

invoiceId integer,

serviceType char(20),

name char(50),

constraint fk\_Serviced\_Invoices foreign key(invoiceId) references Invoices(invoiceId) on delete cascade

);