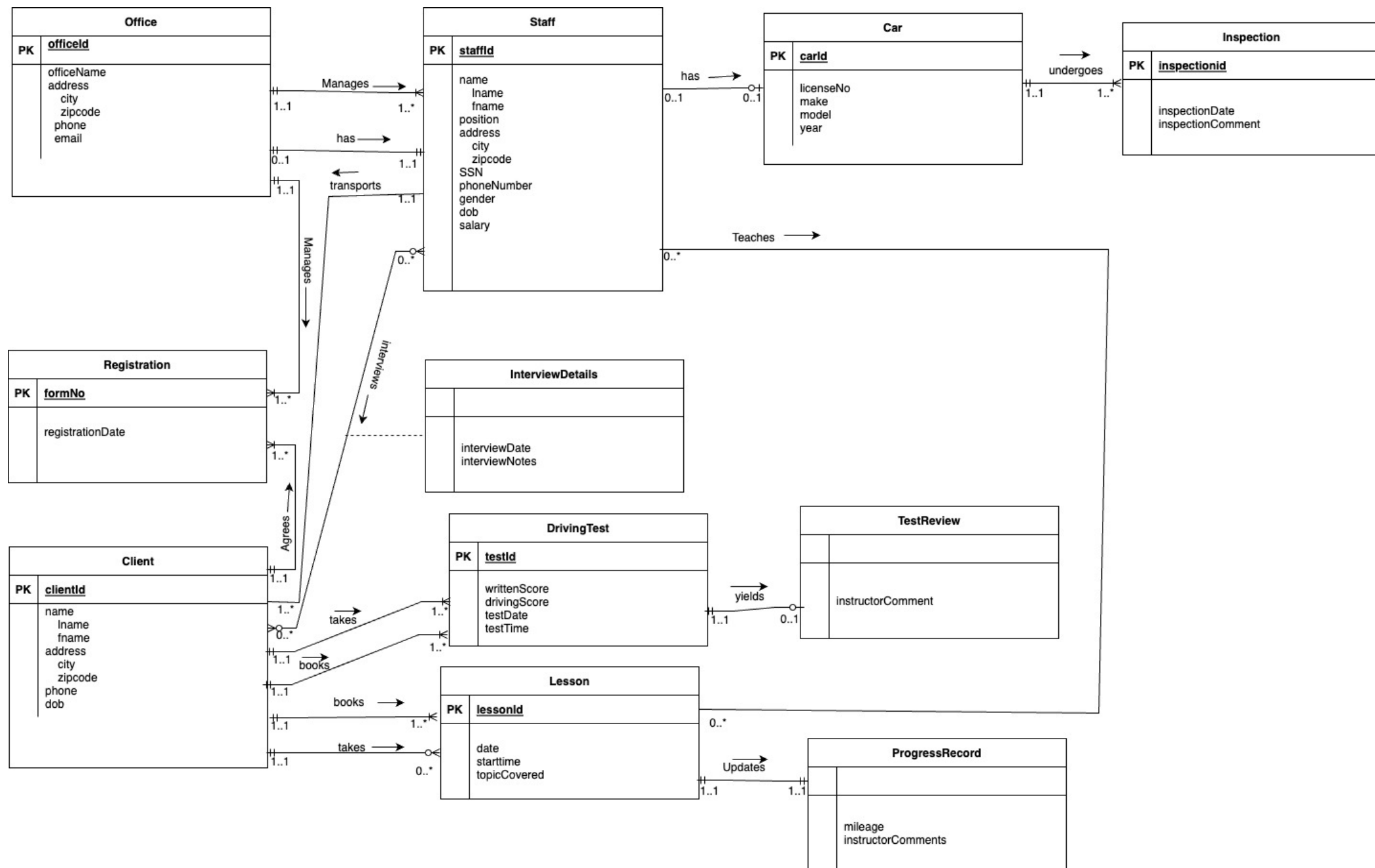


ARINDA HILLARY
DBMS
PROJECT: PART 1
3/11/2024

1) Draw the ER diagram for the EasyDrive School of Motoring that you find in paragraph B.2 in Appendix B of the book.



2) Translate the ER diagram to tables (logical DB design).

Office(officeID, officeName, city, zipCode, managerID, phone)

Primary Key: officeID

Foreign Key: managerID REFERENCES Staff(staffID)

Alternate Key: managerID

Staff(staffID, SSN, fName, lName, position, gender, dob, city, zipCode, phone, officeID)

Primary Key: staffID

Alternate Key: SSN

Foreign Key: officeID REFERENCES Office(officeID)

Car(carID, licenseNo, model, make, year, staffID)

Primary Key: carID

Foreign Key: staffID references Staff(staffID)

Registration(formID, registrationDate, clientID, officeID)

Foreign Key: clientID references Client (clientID)

Foreign Key: officeID references Office(officeID)

Client(clientID, fName, lName, dob, phone, city, zipCode, tpStaffID)

Primary Key: clientID

Foreign Key: tpStaffID REFERENCES Staff(staffID)

Inspection(inspectionID, inspectionDate, comment, carID)

Primary Key: inspectionID

Foreign Key: carID references Car(carID)

InterviewDetails(clientID, interviewDate, interviewTime, comments, staffID)

Primary Key: (clientID, StaffID, interviewDate)

Foreign Key: clientID references Client(clientID)

Foreign Key: staffID references Staff(staffID)

Lesson(lessonID, lessonDate, startDate, topicCovered, clientID, staffID, mileage, instructorComments, lessonStatus)

Primary Key: lessonID

Foreign Key: clientID references Client (Client)

Foreign Key: staffID references Staff(staffID)

DrivingTest(testID, writtenScore, drivingScore, testDate, testTime, clientID, drivingStatus)

Primary Key: testID

Foreign Key: clientID references Client(clientID)

TestReview(instructorComments)

3) Normalize the above tables to the highest normal form that you can.

The tables in 2 are already normalized to 3NF.

4) Input these tables into SQL Server and put some data into them (populate them).

```
USE EasyDrive;
```

```
CREATE TABLE Staff (  
    staffID INT PRIMARY KEY,  
    SSN CHAR(11) UNIQUE,  
    fName VARCHAR(255),  
    lName VARCHAR(255),  
    position VARCHAR(255),  
    gender CHAR(1),  
    dob DATE,  
    city VARCHAR(255),  
    zipCode VARCHAR(10),  
    phone VARCHAR(15),  
    officeID INT,  
);
```

```
CREATE TABLE Office (  
    officeID INT PRIMARY KEY,  
    officeName VARCHAR(255),  
    city VARCHAR(255),  
    zipCode VARCHAR(10),  
    managerID INT,  
    phone VARCHAR(15),  
    FOREIGN KEY (managerID) REFERENCES Staff(staffID)  
);
```

```
CREATE TABLE Car (  
    carID INT PRIMARY KEY,  
    licenseNo VARCHAR(20),  
    model VARCHAR(255),  
    make VARCHAR(255),  
    year INT,  
    staffID INT,  
    FOREIGN KEY (staffID) REFERENCES Staff(staffID)  
);
```

```
CREATE TABLE Client (  
    clientID INT PRIMARY KEY,  
    fName VARCHAR(255),  
    lName VARCHAR(255),  
    dob DATE,  
    phone VARCHAR(15),  
    city VARCHAR(255),  
    zipCode VARCHAR(10),  
    tpStaffID INT,
```

```

FOREIGN KEY (tpStaffID) REFERENCES Staff(staffID)
);

CREATE TABLE Registration (
    formID INT PRIMARY KEY,
    registrationDate DATE,
    clientID INT,
    officeID INT,
    FOREIGN KEY (clientID) REFERENCES Client(clientID),
    FOREIGN KEY (officeID) REFERENCES Office(officeID)
);

CREATE TABLE Inspection (
    inspectionID INT PRIMARY KEY,
    inspectionDate DATE,
    comment TEXT,
    carID INT,
    FOREIGN KEY (carID) REFERENCES Car(carID)
);

CREATE TABLE InterviewDetails (
    clientID INT,
    interviewDate DATE,
    interviewTime TIME,
    comments TEXT,
    staffID INT,
    PRIMARY KEY (clientID, staffID, interviewDate),
    FOREIGN KEY (clientID) REFERENCES Client(clientID),
    FOREIGN KEY (staffID) REFERENCES Staff(staffID)
);

CREATE TABLE Lesson (
    lessonID INT PRIMARY KEY,
    lessonDate DATE,
    startDate DATE,
    topicCovered TEXT,
    clientID INT,
    staffID INT,
    mileage INT,
    instructorComments TEXT,
    lessonStatus VARCHAR(50),
    FOREIGN KEY (clientID) REFERENCES Client(clientID),
    FOREIGN KEY (staffID) REFERENCES Staff(staffID)
);

CREATE TABLE DrivingTest (
    testID INT PRIMARY KEY,
    writtenScore INT,
    drivingScore INT,

```

```

testDate DATE,
testTime TIME,
clientID INT,
drivingStatus VARCHAR(50),
FOREIGN KEY (clientID) REFERENCES Client(clientID)
);

```

```

CREATE TABLE TestReview (
testID INT PRIMARY KEY,
instructorComments TEXT,
FOREIGN KEY (testID) REFERENCES DrivingTest(testID)
);
Go

```

```

ALTER TABLE Staff ADD FOREIGN KEY (officeID) REFERENCES Office(officeID)

```

```

Go

```

```

--STAFF DATA

```

```

use EasyDrive

```

```

--OFFICE DATA

```

```

INSERT INTO Office (officeID, officeName, city, zipCode, managerID, phone) VALUES

```

```

(1, 'Glasgow HQ', 'Glasgow', 'G1 1XX', NULL, '555-1001'),
(2, 'Edinburgh Branch', 'Edinburgh', 'E1 3XX', NULL, '555-1002'),
(3, 'Aberdeen Branch', 'Aberdeen', 'AB10 1XG', NULL, '555-3001'),
(4, 'Inverness Branch', 'Inverness', 'IV1 1LY', NULL, '555-4001'),
(5, 'Dundee Branch', 'Dundee', 'DD1 4HN', NULL, '555-5001');

```

```

INSERT INTO Staff (staffID, SSN, fName, lName, position, gender, dob, city, zipCode, phone, officeID) VALUES

```

```

(1, '555-55-5555', 'John', 'Doe', 'Senior Instructor', 'M', '1970-01-01', 'Glasgow', 'G1 1XX', '555-0001', 1),
(2, '666-66-6666', 'Jane', 'Smith', 'Instructor', 'F', '1980-02-02', 'Glasgow', 'G1 2XX', '555-0002', 1),
(3, '777-77-7777', 'Jim', 'Beam', 'Instructor', 'M', '1990-03-03', 'Edinburgh', 'E1 3XX', '555-0003', 2),
(4, '888-88-8888', 'Julia', 'Roberts', 'Administrator', 'F', '1975-04-04', 'Glasgow', 'G1 4XX', '555-0004', 1),
(5, '111-22-3333', 'Sarah', 'Conner', 'Senior Instructor', 'F', '1982-05-21', 'Aberdeen', 'AB10 1XG', '555-5005', 3),
(6, '222-33-4444', 'Gary', 'Oak', 'Instructor', 'M', '1991-08-19', 'Aberdeen', 'AB10 1XG', '555-6006', 3),
(7, '333-44-5555', 'Diana', 'Prince', 'Administrator', 'F', '1985-11-30', 'Aberdeen', 'AB10 1XG', '555-7007', 3),

```

```

(8, '444-55-6666', 'Bruce', 'Wayne', 'Senior Instructor', 'M', '1979-04-17', 'Inverness', 'IV1 1LY', '555-8008', 4),
(9, '555-66-7777', 'Clark', 'Kent', 'Instructor', 'M', '1988-06-26', 'Inverness', 'IV1 1LY', '555-9009', 4),
(10, '666-77-8888', 'Lois', 'Lane', 'Administrator', 'F', '1990-02-15', 'Inverness', 'IV1 1LY', '555-1010', 4),

```

```

(11, '777-88-9999', 'Peter', 'Parker', 'Senior Instructor', 'M', '1977-12-27', 'Dundee', 'DD1 4HN', '555-1111', 5),
(12, '888-99-0000', 'Mary', 'Jane', 'Instructor', 'F', '1986-05-17', 'Dundee', 'DD1 4HN', '555-1212', 5),
(13, '999-00-1111', 'Harry', 'Osborn', 'Administrator', 'M', '1984-03-13', 'Dundee', 'DD1 4HN', '555-1313', 5),

```

```

--more senior instructors

```

```

(14, '111-11-1111', 'Tony', 'Stark', 'Senior Instructor', 'M', '1970-05-29', 'Glasgow', 'G1 5XX', '555-0101', 1),

```

```

(15,'222-22-2222', 'Steve', 'Rogers', 'Senior Instructor', 'M', '1975-07-04', 'Edinburgh', 'E1 4DD', '555-0202', 2),
(16,'333-33-3333', 'Natasha', 'Romanoff', 'Senior Instructor', 'F', '1984-12-03', 'Aberdeen', 'AB15 4ZT', '555-0303', 3),
(17,'444-44-4444', 'Bruce', 'Banner', 'Senior Instructor', 'M', '1979-12-18', 'Inverness', 'IV2 5GH', '555-0404', 4),
(18,'555-55-5551', 'Thor', 'Odinson', 'Senior Instructor', 'M', '1983-11-11', 'Dundee', 'DD3 7JY', '555-0505', 5),

--more instructors
(19, '111-11-1112', 'Wanda', 'Maximoff', 'Instructor', 'F', '1990-01-30', 'Glasgow', 'G2 6QQ', '555-0606', 1),
(20, '222-22-2223', 'Pietro', 'Maximoff', 'Instructor', 'M', '1990-01-30', 'Edinburgh', 'E2 3CC', '555-0707', 2),
(21, '333-33-3334', 'Vision', 'Android', 'Instructor', 'M', '2015-04-23', 'Aberdeen', 'AB16 5N0', '555-0808', 3),
(22, '444-44-4445', 'Sam', 'Wilson', 'Instructor', 'M', '1989-09-23', 'Inverness', 'IV3 8KP', '555-0909', 4),
(23, '555-55-5552', 'Bucky', 'Barnes', 'Instructor', 'M', '1987-03-10', 'Dundee', 'DD4 8UH', '555-1011', 5),

--more administrative staff
(24, '111-11-1113', 'Nick', 'Fury', 'Administrator', 'M', '1963-12-21', 'Glasgow', 'G3 7YT', '555-1112', 1),
(25, '222-22-2224', 'Maria', 'Hill', 'Administrator', 'F', '1982-04-04', 'Edinburgh', 'E3 5RT', '555-1213', 2),
(26, '333-33-3335', 'Phil', 'Coulson', 'Administrator', 'M', '1964-07-08', 'Aberdeen', 'AB17 9PL', '555-1314', 3),
(27, '444-44-4446', 'Clint', 'Barton', 'Administrator', 'M', '1977-01-07', 'Inverness', 'IV4 9BN', '555-1415', 4),
(28, '555-55-5553', 'Scott', 'Lang', 'Administrator', 'M', '1981-02-14', 'Dundee', 'DD5 1ER', '555-1516', 5);

-- Update office data to assign Senior Instructors as managers
UPDATE Office SET managerID = 1 WHERE officeID = 1; -- Glasgow HQ already has John Doe as manager
UPDATE Office SET managerID = 15 WHERE officeID = 2; -- Assigning Steve Rogers as manager of Edinburgh Branch
UPDATE Office SET managerID = 5 WHERE officeID = 3; -- Sarah Conner is already set as the manager of Aberdeen Branch
UPDATE Office SET managerID = 17 WHERE officeID = 4; -- Assigning Bruce Banner as manager of Inverness Branch
UPDATE Office SET managerID = 11 WHERE officeID = 5; -- Peter Parker is already set as the manager of Dundee Branch

--CLIENT DATA
INSERT INTO Client (clientID, fName, lName, dob, phone, city, zipCode, tpStaffID) VALUES
(1, 'Alice', 'Wonderland', '1995-05-05', '555-2001', 'Glasgow', 'G1 5XX', 2),
(2, 'Bob', 'Builder', '1996-06-06', '555-2002', 'Edinburgh', 'E1 6XX', 3);

-- Clients for Glasgow HQ
INSERT INTO Client (clientID, fName, lName, dob, phone, city, zipCode, tpStaffID) VALUES
(3, 'Charlie', 'Day', '1997-03-21', '555-3001', 'Glasgow', 'G1 7XX', 2),
(4, 'Dee', 'Reynolds', '1998-04-22', '555-3002', 'Glasgow', 'G1 8XX', 14),
(5, 'Frank', 'Reynolds', '1999-05-23', '555-3003', 'Glasgow', 'G1 9XX', 19);

-- Clients for Edinburgh Branch
INSERT INTO Client (clientID, fName, lName, dob, phone, city, zipCode, tpStaffID) VALUES
(6, 'Ron', 'Swanson', '1997-06-24', '555-4001', 'Edinburgh', 'E1 7XX', 20),
(7, 'Leslie', 'Knope', '1998-07-25', '555-4002', 'Edinburgh', 'E1 8XX', 15),
(8, 'Ben', 'Wyatt', '1999-08-26', '555-4003', 'Edinburgh', 'E1 9XX', 3);

-- Clients for Aberdeen Branch
INSERT INTO Client (clientID, fName, lName, dob, phone, city, zipCode, tpStaffID) VALUES
(9, 'Homer', 'Simpson', '1997-09-27', '555-5001', 'Aberdeen', 'AB11 1XX', 16),

```

```
(10, 'Marge', 'Simpson', '1998-10-28', '555-5002', 'Aberdeen', 'AB12 2XX', 6),
(11, 'Bart', 'Simpson', '1999-11-29', '555-5003', 'Aberdeen', 'AB13 3XX', 21);
```

-- Clients for Inverness Branch

```
INSERT INTO Client (clientID, fName, lName, dob, phone, city, zipCode, tpStaffID) VALUES
(12, 'Liz', 'Lemon', '1997-12-30', '555-6001', 'Inverness', 'IV2 2XX', 17),
(13, 'Jack', 'Donaghy', '1998-01-31', '555-6002', 'Inverness', 'IV3 3XX', 22),
(14, 'Tracy', 'Jordan', '1999-02-01', '555-6003', 'Inverness', 'IV4 4XX', 9);
```

-- Clients for Dundee Branch

```
INSERT INTO Client (clientID, fName, lName, dob, phone, city, zipCode, tpStaffID) VALUES
(15, 'Michael', 'Scott', '1997-03-02', '555-7001', 'Dundee', 'DD2 2XX', 18),
(16, 'Dwight', 'Schrute', '1998-04-03', '555-7002', 'Dundee', 'DD3 3XX', 23),
(17, 'Jim', 'Halpert', '1999-05-04', '555-7003', 'Dundee', 'DD4 4XX', 11);
```

--REGISTRATION DATA

```
INSERT INTO Registration (formID, registrationDate, clientID, officeID) VALUES
(1, '2023-01-01', 1, 1),
(2, '2023-02-01', 2, 2);
```

-- Registration data for new clients

```
INSERT INTO Registration (formID, registrationDate, clientID, officeID) VALUES
(3, '2023-02-10', 3, 1),
(4, '2023-02-15', 4, 1),
(5, '2023-02-20', 5, 1),
(6, '2023-03-01', 6, 2),
(7, '2023-03-05', 7, 2),
(8, '2023-03-10', 8, 2),
(9, '2023-03-15', 9, 3),
(10, '2023-03-20', 10, 3),
(11, '2023-03-25', 11, 3),
(12, '2023-04-01', 12, 4),
(13, '2023-04-05', 13, 4),
(14, '2023-04-10', 14, 4),
(15, '2023-04-15', 15, 5),
(16, '2023-04-20', 16, 5),
(17, '2023-04-25', 17, 5);
```

--CAR DATA

```
INSERT INTO Car (carID, licenseNo, model, make, year, staffID) VALUES
(1, 'SCX-001', 'Focus', 'Ford', 2020, 1), -- John Doe, Senior Instructor
(2, 'SCX-002', 'Civic', 'Honda', 2021, 2), -- Jane Smith, Instructor
(3, 'SCX-003', 'Corolla', 'Toyota', 2021, 3), -- Jim Beam, Instructor
(4, 'SCX-005', 'Impreza', 'Subaru', 2020, 5), -- Sarah Conner, Senior Instructor
(5, 'SCX-006', '3', 'Mazda', 2021, 6), -- Gary Oak, Instructor
(6, 'SCX-008', 'Golf', 'Volkswagen', 2020, 8), -- Bruce Wayne, Senior Instructor
(7, 'SCX-009', 'Astra', 'Opel', 2021, 9), -- Clark Kent, Instructor
(8, 'SCX-011', 'Megane', 'Renault', 2020, 11), -- Peter Parker, Senior Instructor
```

```

(9, 'SCX-012', 'Leon', 'Seat', 2021, 12), -- Mary Jane, Instructor
(10, 'SCX-014', 'Model 3', 'Tesla', 2022, 14), -- Tony Stark, Senior Instructor
(11, 'SCX-015', 'i3', 'BMW', 2022, 15), -- Steve Rogers, Senior Instructor
(12, 'SCX-016', 'Zoe', 'Renault', 2022, 16), -- Natasha Romanoff, Senior Instructor
(13, 'SCX-017', 'ID.3', 'Volkswagen', 2022, 17), -- Bruce Banner, Senior Instructor
(14, 'SCX-018', 'Ioniq', 'Hyundai', 2022, 18), -- Thor Odinson, Senior Instructor
(15, 'SCX-019', 'Fiesta', 'Ford', 2021, 19), -- Wanda Maximoff, Instructor
(16, 'SCX-020', 'Clio', 'Renault', 2021, 20), -- Pietro Maximoff, Instructor
(17, 'SCX-021', '208', 'Peugeot', 2021, 21), -- Vision, Instructor
(18, 'SCX-022', 'Yaris', 'Toyota', 2021, 22), -- Sam Wilson, Instructor
(19, 'SCX-023', 'Polo', 'Volkswagen', 2021, 23); -- Bucky Barnes, Instructor

```

--INSPECTION DATA

```

INSERT INTO Inspection (inspectionID, inspectionDate, comment, carID) VALUES

```

```

(1, '2023-01-10', 'No issues found', 1),
(2, '2023-01-15', 'Minor scratches', 2);

```

-- Additional inspection data

```

INSERT INTO Inspection (inspectionID, inspectionDate, comment, carID) VALUES

```

```

(3, '2023-02-05', 'Oil change needed', 1),
(4, '2023-02-10', 'Brake check passed', 2),
(5, '2023-02-15', 'Tire replacement required', 1),
(6, '2023-02-20', 'Engine check required', 2),
(7, '2023-02-25', 'No issues found', 1),
(8, '2023-03-01', 'Windshield wiper replacement', 2),
(9, '2023-03-05', 'Air filter replacement needed', 1),
(10, '2023-03-10', 'Battery in good condition', 2),
(11, '2023-03-15', 'No issues found', 1),
(12, '2023-03-20', 'Headlights adjustment required', 2),
(13, '2023-03-25', 'Oil leak detected', 1),
(14, '2023-03-30', 'Steering alignment check', 2),
(15, '2023-04-04', 'Brake fluid replacement', 1),
(16, '2023-04-09', 'AC system check', 2),
(17, '2023-04-14', 'No issues found', 1),
(18, '2023-04-19', 'Exhaust system check', 2);

```

--INTERVIEW DETAILS DATA

```

INSERT INTO InterviewDetails (clientID, interviewDate, interviewTime, comments, staffID) VALUES

```

```

(1, '2023-01-20', '10:00:00', 'Positive attitude', 2),
(2, '2023-01-25', '11:00:00', 'Needs improvement in focus', 3);

```

-- Additional InterviewDetails data

```

INSERT INTO InterviewDetails (clientID, interviewDate, interviewTime, comments, staffID) VALUES

```

```

(3, '2023-02-11', '10:30:00', 'Showed enthusiasm for learning', 2),
(4, '2023-02-12', '11:00:00', 'Asked insightful questions', 14),
(5, '2023-02-13', '09:45:00', 'Seemed nervous', 19),
(6, '2023-02-14', '14:00:00', 'Very confident', 20),
(7, '2023-02-15', '15:30:00', 'Lacks basic knowledge', 15),

```



```
(8, '2023-02-16', '16:15:00', 'Has potential, but needs focus', 3),
(9, '2023-02-17', '10:00:00', 'Excellent comprehension', 16),
(10, '2023-02-18', '11:15:00', 'Distracted during the session', 6),
(11, '2023-02-19', '13:30:00', 'Motivated and eager', 21),
(12, '2023-02-20', '08:30:00', 'Punctual but unprepared', 17),
(13, '2023-02-21', '09:00:00', 'Well prepared and articulate', 22),
(14, '2023-02-22', '14:30:00', 'Needs to improve communication skills', 9),
(15, '2023-02-23', '15:00:00', 'Outstanding performance', 18),
(16, '2023-02-24', '15:45:00', 'Average understanding', 23),
(17, '2023-02-25', '16:00:00', 'Shows great interest in practical learning', 11);
```

--LESSON DATA

```
INSERT INTO Lesson (lessonID, lessonDate, startDate, topicCovered, clientID, staffID, mileage, instructorComments,
lessonStatus) VALUES
(1, '2023-01-30', '2023-01-01', 'Basic controls', 1, 2, 10, 'Good progress', 'Completed'),
(2, '2023-02-05', '2023-01-15', 'Road signs', 2, 3, 15, 'Satisfactory understanding', 'Completed');
```

-- Additional Lesson data

```
INSERT INTO Lesson (lessonID, lessonDate, startDate, topicCovered, clientID, staffID, mileage, instructorComments,
lessonStatus) VALUES
(3, '2023-02-10', '2023-01-20', 'Parallel parking', 3, 14, 5, 'Needs more practice', 'Completed'),
(4, '2023-02-15', '2023-01-25', 'Highway driving', 4, 19, 20, 'Excellent control', 'Completed'),
(5, '2023-02-20', '2023-01-30', 'Night driving', 5, 2, 10, 'Very cautious', 'Completed'),
(6, '2023-02-25', '2023-02-01', 'Defensive driving', 6, 20, 12, 'Understanding and application are good', 'Completed'),
(7, '2023-03-02', '2023-02-05', 'Driving in rain', 7, 15, 8, 'Improved from last lesson', 'Completed'),
(8, '2023-03-07', '2023-02-10', 'Emergency stops', 8, 3, 7, 'Quick reflexes', 'Completed'),
(9, '2023-03-12', '2023-02-15', 'Reverse parking', 9, 16, 6, 'Struggles with spatial awareness', 'Completed'),
(10, '2023-03-17', '2023-02-20', 'Eco-driving', 10, 6, 9, 'Conscientious and eco-friendly driving', 'Completed'),
(11, '2023-03-22', '2023-02-25', 'City driving', 11, 21, 11, 'Navigates traffic well', 'Completed'),
(12, '2023-03-27', '2023-03-01', 'Country driving', 12, 17, 13, 'Confident in rural settings', 'Completed'),
(13, '2023-04-01', '2023-03-05', 'Motorway driving', 13, 22, 16, 'Needs to watch speed limits', 'Completed'),
(14, '2023-04-06', '2023-03-10', 'Vehicle maintenance', 14, 9, 4, 'Highly interested in car mechanics', 'Completed'),
(15, '2023-04-11', '2023-03-15', 'Driving etiquette', 15, 18, 5, 'Polite and considers other drivers', 'Completed'),
(16, '2023-04-16', '2023-03-20', 'Using navigation systems', 16, 23, 8, 'Learns technology quickly', 'Completed'),
(17, '2023-04-21', '2023-03-25', 'Fuel-efficient driving', 17, 11, 7, 'Understands importance of efficiency', 'Completed');
```

-- Extra lessons for selected clients

```
INSERT INTO Lesson (lessonID, lessonDate, startDate, topicCovered, clientID, staffID, mileage, instructorComments,
lessonStatus) VALUES
(18, '2023-02-12', '2023-01-05', 'Parking techniques', 1, 14, 8, 'Improved parking skills', 'Completed'),
(19, '2023-03-10', '2023-02-08', 'Advanced controls', 1, 2, 12, 'Mastered advanced techniques', 'Completed'),
(20, '2023-03-15', '2023-02-12', 'Defensive driving', 3, 19, 14, 'Good defensive driving', 'Completed'),
(21, '2023-03-05', '2023-02-18', 'Traffic rules', 6, 20, 10, 'Clear understanding of traffic laws', 'Completed'),
(22, '2023-04-10', '2023-03-15', 'Rural driving', 6, 15, 16, 'Comfortable with rural environments', 'Completed'),
(23, '2023-02-20', '2023-01-25', 'Speed control', 2, 3, 9, 'Better at speed management', 'Completed'),
(24, '2023-03-25', '2023-02-28', 'Night driving', 5, 22, 7, 'Shows confidence driving at night', 'Completed');
```

```
--DRIVING TEST
-- DrivingTest data for clients with at least 2 lessons
INSERT INTO DrivingTest (testID, writtenScore, drivingScore, testDate, testTime, clientID, drivingStatus) VALUES
(1, 85, 80, '2023-03-05', '10:00:00', 1, 'Passed'),
(2, 78, 70, '2023-03-06', '11:00:00', 2, 'Passed'),
(3, 90, 85, '2023-03-07', '12:00:00', 3, 'Passed'),
(4, 65, 60, '2023-03-08', '13:00:00', 5, 'Failed'),
(5, 75, 70, '2023-03-09', '14:00:00', 6, 'Failed');

-- TestReview data for the failed test
INSERT INTO TestReview (testID, instructorComments) VALUES
(4, 'Needs to improve attention to detail and reaction to road signs.'),
(5, 'Needs to check their driving speed.');
```

5) Write, execute and test (make sure the output is correct!!) all queries given in paragraph B.2 in Appendix B of the book using SSMS/ADS with SQL Server.

```
--no 1 names and telephone numbers of managers at each office
SELECT o.officeID,o.officeName,lname, fname, s.phone
FROM Staff s, Office o
WHERE s.staffID = o.managerID;
```

Results		Messages				
	officeID	officeName	lname	fname	phone	
1	1	Glasgow HQ	Doe	John	555-0001	
2	2	Edinburgh Branch	Rogers	Steve	555-0202	
3	3	Aberdeen Branch	Conner	Sarah	555-5005	
4	4	Inverness Branch	Banner	Bruce	555-0404	
5	5	Dundee Branch	Parker	Peter	555-1111	

```
--no 2 full address of all offices in Glasgow
SELECT officeID, officeName,CONCAT (city ,',', zipCode) AS 'Full Address'
FROM Office
WHERE city like '%Glasgow%';
```

Results		Messages	
	officeID	officeName	Full Address
1	1	Glasgow HQ	Glasgow,G1 1XX

```
--no 4 total number of staff at each office
SELECT s.officeID, officeName, COUNT(*) AS 'Total Number of Staff'
```

```

FROM Staff s, Office o
WHERE s.officeID = o.officeID
GROUP BY s.officeID, officeName;

```

Results Messages

	officeID	officeName	Total Number of Staff
1	1	Glasgow HQ	6
2	2	Edinburgh Branch	4
3	3	Aberdeen Branch	6
4	4	Inverness Branch	6
5	5	Dundee Branch	6

--10 Registration number of cars that have no faults found

```

SELECT c.licenseNo, i.comment
FROM Car c, Inspection i
WHERE c.carID = i.carID AND comment LIKE '%No issues%';

```

Results Messages

	licenseNo	comment
1	SCX-001	No issues found
2	SCX-001	No issues found
3	SCX-001	No issues found
4	SCX-001	No issues found