

# Hector Alvarez

## Week3

### Exercises

Problems 1 and 2 executed at the same time.

The screenshot displays the Microsoft SQL Server Enterprise Edition interface. The left pane shows the Object Explorer with the 'Databases' folder expanded, listing various databases including 'AdventureWorks2017', 'AP', 'Examples', 'membership', 'MyGuitarShop', 'ProductOrders', 'WideWorldImporters', and 'WideWorldImportersDW'. The central pane shows the query editor with the following SQL script:

```
create table Groups
(GroupID int NOT NULL IDENTITY PRIMARY KEY,
GroupName varchar(50) NOT NULL,
Dues money NOT NULL DEFAULT 0 CHECK (Dues >= 0));

create table GroupMembership
(GroupID int REFERENCES Groups(GroupID),
IndividualID int REFERENCES Individuals(IndividualID)); */

/* CREATE CLUSTERED INDEX IX_GroupMembership_GroupID
ON GroupMembership(GroupID)
CREATE INDEX IX_GroupMembership_IndividualID
ON GroupMembership(IndividualID);

ALTER TABLE Individuals
ADD DuesPaid bit NOT NULL DEFAULT 0; */

ALTER TABLE Invoices
ADD CHECK ((PaymentDate is null and PaymentTotal = 0) or (PaymentDate is not null and PaymentTotal > 0)),
CHECK ((PaymentTotal + CreditTotal) <= InvoiceTotal);
```

The bottom pane shows the Messages window with the following output:

```
Commands completed successfully.
Completion time: 2021-06-23T19:16:40.4822936+00:00
```

The status bar at the bottom indicates that the query was executed successfully, with the completion time being 00:00:00 and 0 rows affected.

## Problem 5

The screenshot displays the Microsoft SQL Server Enterprise Manager interface. The top pane shows the Object Explorer with the 'MyGuitarShop' database selected. The bottom pane shows the SQL Query window with the following T-SQL script:

```
create DATABASE Membership;

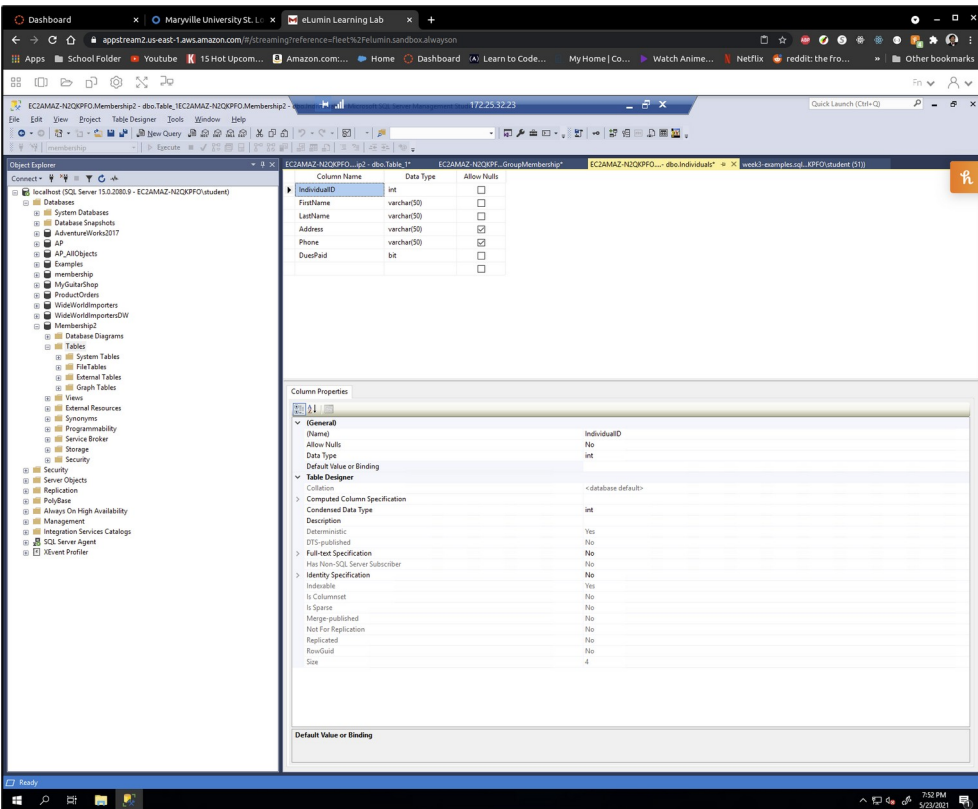
create table Individuals
(IndividualID int NOT NULL IDENTITY PRIMARY KEY,
  FirstName varchar(50) NOT NULL,
  LastName varchar(50) NOT NULL,
  Address varchar(100) NULL,
  Phone varchar(50) NULL);

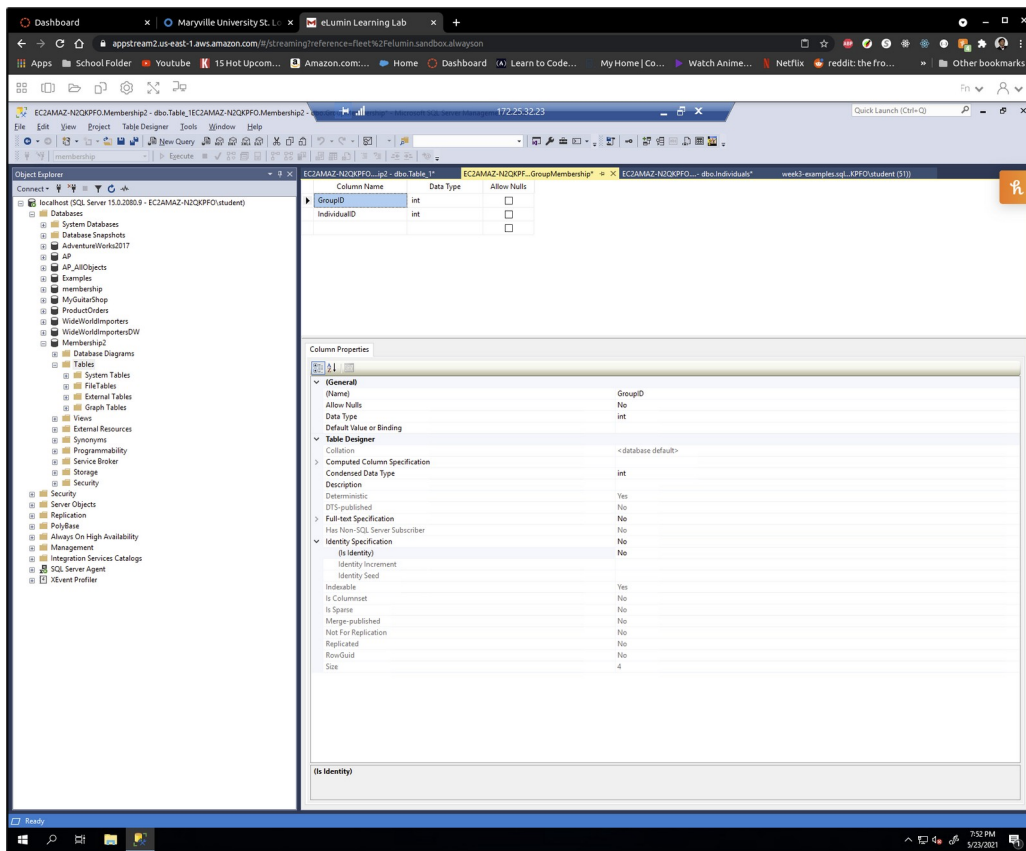
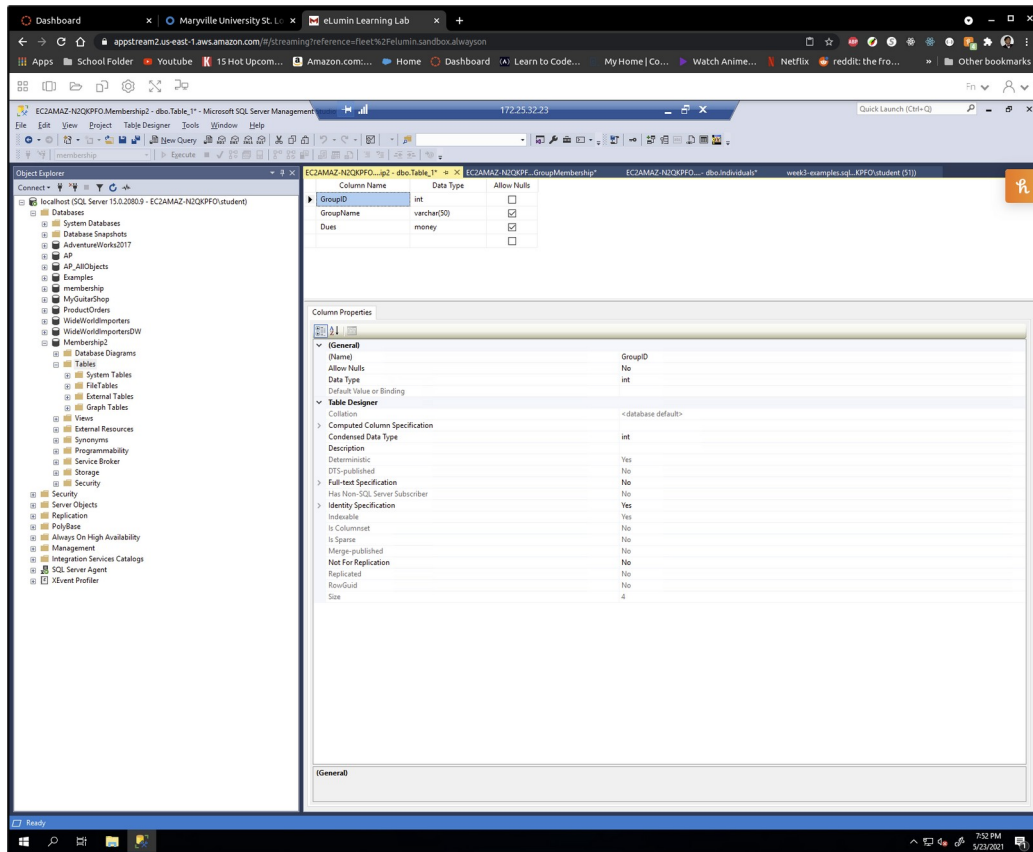
create table Groups
(GroupID int NOT NULL IDENTITY PRIMARY KEY,
  GroupName varchar(50) NOT NULL,
  Dues money NOT NULL DEFAULT 0 CHECK (Dues >= 0));

create Table GroupMembership
(GroupID int REFERENCES Groups(GroupID),
  IndividualID int REFERENCES Individuals(IndividualID));
```

The Messages pane at the bottom indicates that the commands were completed successfully. The status bar at the bottom shows 'Query executed successfully.' and 'localhost (15.0 RTM) | EC2AMAZ-N2QKPF0|studen... | MyGuitarShop | 00:00:00 | 0 rows'.

## Create Tables





## Part B. problem 3 - Indexes

