**Murach Chapter - 11**

**Exercises**

1. CREATE DATABASE Membership;
2. CREATE TABLE Individuals

(IndividualID INT PRIMARY KEY IDENTITY,

FirstName VARCHAR NOT NULL,

LastName VARCHAR NOT NULL,

Address VARCHAR NOT NULL,

Phone VARCHAR NOT NULL)

CREATE TABLE Groups

(GroupID INT PRIMARY KEY IDENTITY,

GroupName VARCHAR NOT NULL,

Dues MONEY NOT NULL DEFAULT 0 CHECK (Dues >= 0))

CREATE TABLE GroupMembership

(GroupID INT NOT NULL REFERENCES Groups (GroupID),

IndividualID INT NOT NULL REFERENCES Individuals (IndividualID))

1. CREATE CLUSTERED INDEX IX\_GroupID

ON GroupMembership (GroupID);

CREATE INDEX IX\_IndividualID

ON GroupMembership (IndividualID);

1. ALTER TABLE Individuals

ADD DuesPaid BIT NOT NULL DEFAULT 0;

1. ALTER TABLE Invoices WITH CHECK

ADD check ((PaymentTotal = 0 AND PaymentDate is NULL) OR (PaymentTotal > 0 AND PaymentDate is NOT NULL));

ALTER TABLE Invoices WITH CHECK

ADD CHECK ((PaymentTotal + CreditTotal) <= InvoiceTotal);

1. DROP TABLE GroupMembership;

CREATE TABLE GroupMembership

(GroupID INT NOT NULL UNIQUE REFERENCES Groups (GroupID),

IndividualID INT NOT NULL UNIQUE REFERENCES Individuals (IndividualID))