



CONESTOGA

Connect Life and Learning

Student Name:	Aagam Sanjay Shah
Deliverable:	Assignment 2
Course Name:	NTWK8121-24S-Sec3-SQL Server

Date Assigned:	13/06/2024
Date Due:	20/06/2024
Rules:	<ul style="list-style-type: none">• Individual.• Cheating is not allowed.• Plagiarism counts as cheating!• That FAILURE to submit work in the course can result in a grade of 'F' or 'I' for failure to complete the course!

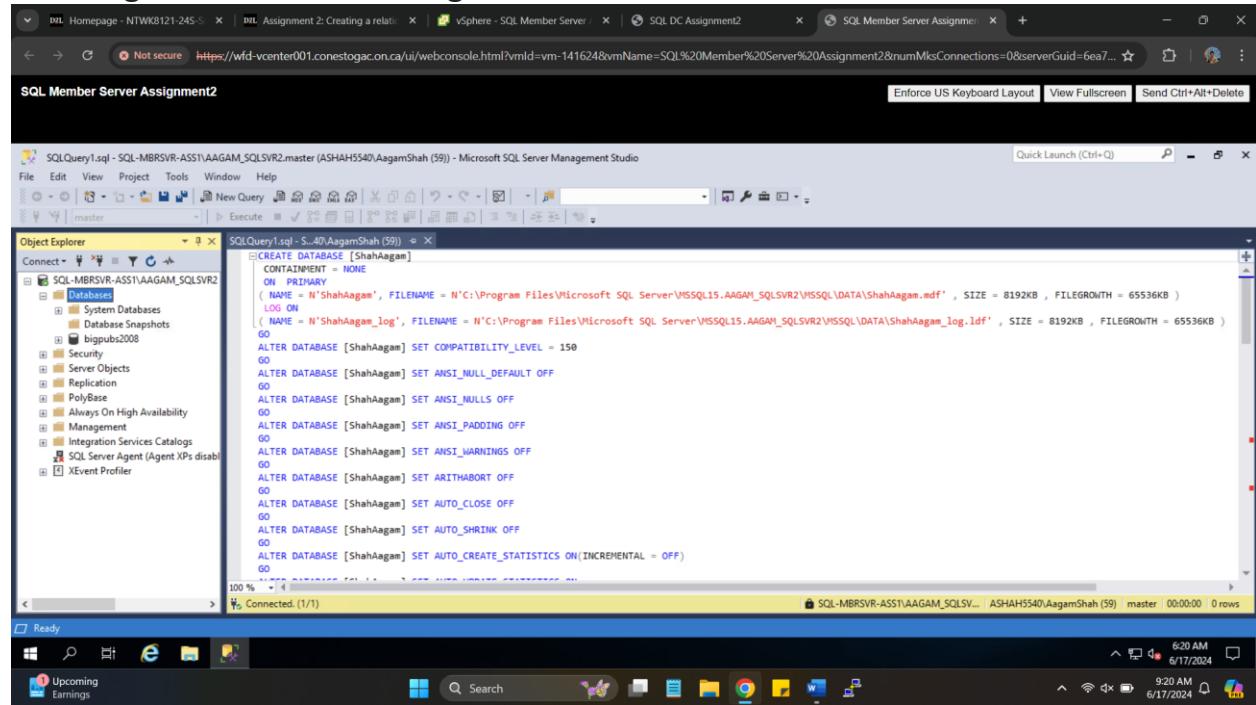
Goal:

Create a relational database that maintains a list of College Programs and students.

There should be (at least) two tables.

1. One for students
2. One for school programs
3. **if you feel there needs to be more tables, please explain your design

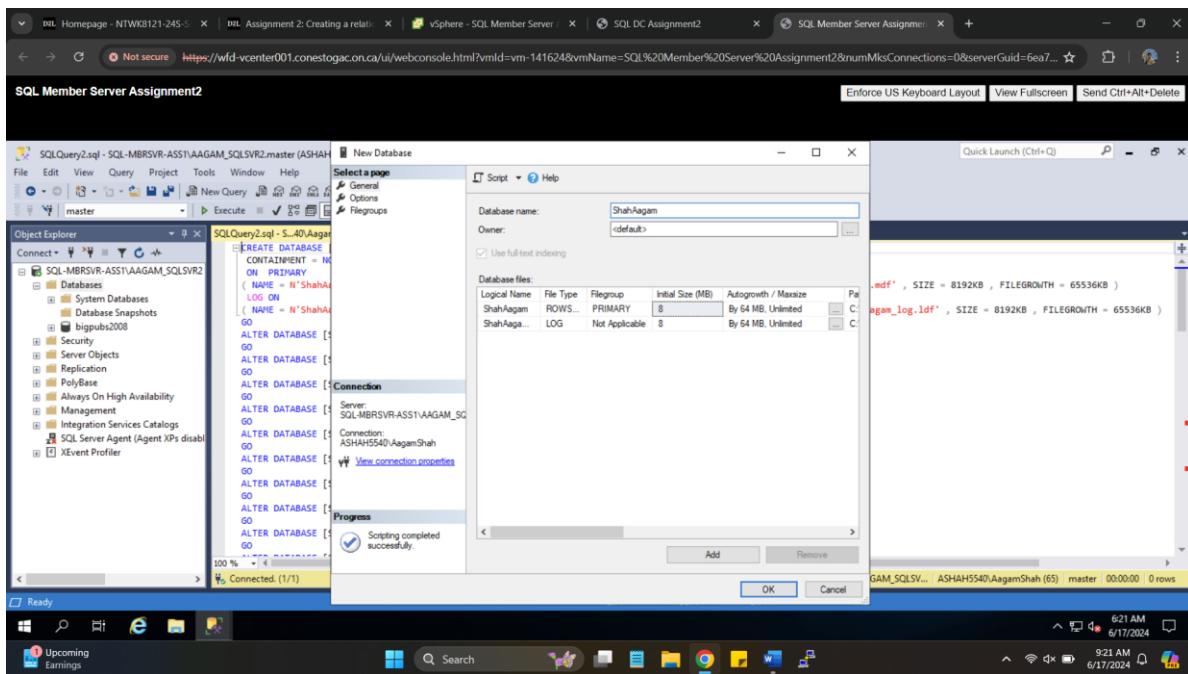
Creating Database: "ShahAagam"



The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer pane on the left shows the connection to 'SQL-MBRSRV-ASS1\AAGAM_SQLSVR2'. The 'Databases' node is expanded, showing 'master', 'tempdb', 'model', 'msdb', and 'ShahAagam'. The 'ShahAagam' database is selected. The 'SQLQuery1.sql - SQL-MBRSRV-ASS1\AAGAM_SQLSVR2.master (ASHAH5540)\AagamShah (59) - Microsoft SQL Server Management Studio' window contains the following T-SQL script:

```
CREATE DATABASE [ShahAagam]
CONTAINMENT = NONE
ON PRIMARY
( NAME = N'Shangam', FILENAME = N'C:\Program Files\Microsoft SQL Server\MSSQL15.AAGAM_SQLSVR2\MSSQL\DATA\ShahAagam.mdf' , SIZE = 8192KB , FILEGROWTH = 65536KB )
LOG ON
( NAME = N'Shangam_log', FILENAME = N'C:\Program Files\Microsoft SQL Server\MSSQL15.AAGAM_SQLSVR2\MSSQL\DATA\ShahAagam_log.ldf' , SIZE = 8192KB , FILEGROWTH = 65536KB )
GO
ALTER DATABASE [ShahAagam] SET COMPATIBILITY_LEVEL = 150
GO
ALTER DATABASE [ShahAagam] SET ANSI_NULL_DEFAULT OFF
GO
ALTER DATABASE [ShahAagam] SET ANSI_NULLS OFF
GO
ALTER DATABASE [ShahAagam] SET ANSI_PADDING OFF
GO
ALTER DATABASE [ShahAagam] SET ANSI_WARNINGS OFF
GO
ALTER DATABASE [ShahAagam] SET ARITHABORT OFF
GO
ALTER DATABASE [ShahAagam] SET AUTO_CLOSE OFF
GO
ALTER DATABASE [ShahAagam] SET AUTO_SHRINK OFF
GO
ALTER DATABASE [ShahAagam] SET AUTO_CREATE_STATISTICS ON(INCREMENTAL = OFF)
```

The status bar at the bottom indicates 'Connected. (1/1)' and the connection details: 'SQL-MBRSRV-ASS1\AAGAM_SQLSVR2 (ASHAH5540)\AagamShah (59) master | 00:00:00 | 0 rows'.



Requirements:

1. For each student, we need a student ID, Social insurance number, firstname, lastname, email address, phone number, and start date
 - a. Student ID & Social Insurance numbers, should be unique
 - b. Social insurance number format must be: NNN-NNN-NNN: Example: 123-456-789

vSphere - SQL Member Server / SQL Member Server Assignment2 / Assignment 2: Creating a relation

Not secure https://wfd-vcenter001.conestogac.on.ca/ui/webconsole.html?vmId=vm-141624&vmName=SQL%20Member%20Server%20Assignment2&numMksConnections=0&serverGuid=6ea7... ☆

SQL Member Server Assignment2

Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete

SQLQuery12.sql - SQL-MBRSVR-ASS1\AAGAM_SQLSVR\ShahAgam (ASHAH550\AagamShah (65)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

ShahAgam | Execute | Quick Launch (Ctrl+Q) |

Object Explorer

Connect Connect to Database... Connect to Instance...

FileTables External Tables Graph Tables dbo.Programs

dbo.Students

- Columns
 - StudentID (PK, int, not null)
 - SocialInsuranceNumber (char(11), not null)
 - Firstname (varchar(50), null)
 - Lastname (varchar(50), null)
 - EmailAddress (varchar(50), null)
 - PhoneNumber (varchar(50), null)
 - StartDate (date, null)
- Keys
- Constraints
- Triggers
- Indexes
- Statistics

Views External Resources Synonyms Programmability

SQLQuery12.sql - 40AagamShah (65) × SQLQuery10.sql - 40AagamShah (52) ×

```
***** Object: Table [dbo].[Students] Script Date: 6/28/2024 4:14:13 AM *****
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO

CREATE TABLE [dbo].[Students](
    [StudentID] [int] IDENTITY(1,1) NOT NULL,
    [SocialInsuranceNumber] [char](11) NOT NULL,
    [Firstname] [varchar](50) NULL,
    [Lastname] [varchar](50) NULL,
    [EmailAddress] [varchar](50) NULL,
    [PhoneNumber] [varchar](50) NULL,
    [StartDate] [date] NULL,
    CONSTRAINT [PK_Students] PRIMARY KEY CLUSTERED
(
    [StudentID] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
CONSTRAINT [UK_SIN] UNIQUE NONCLUSTERED
(
    [SocialInsuranceNumber] ASC
)WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
ON [PRIMARY]
GO
```

100 % < > Connected. (1/1) Activate Windows

SQL-MBRSVR-ASS1\AAGAM_SQLSVR\ShahAgam (ASHAH550\AagamShah (65)) ShahAgam | 0:00:00 | 0 rows

Ready

Windows Search File Explorer Task View Start Taskbar

Current temp Near record

4:14 AM 6/28/2024 7:14 AM 6/28/2024 7:14 AM 6/28/2024

vSphere - SQL Member Server / SQL Member Server Assignment2 / Assignment 2: Creating a relation

Not secure https://wfd-vcenter001.conestogac.on.ca/ui/webconsole.html?vmId=vm-141624&vmName=SQL%20Member%20Server%20Assignment2&numMksConnections=0&serverGuid=6ea7... ☆

SQL Member Server Assignment2

Enforce US Keyboard Layout View Fullscreen Send Ctrl+Alt+Delete

ShahAgam-AlterStudentsForeignKey.sql - SQL-MBRSVR-ASS1\AAGAM_SQLSVR\ShahAgam (ASHAH550\AagamShah (55)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

ShahAgam | Execute | Quick Launch (Ctrl+Q) |

Object Explorer

Connect Connect to Database... Connect to Instance...

Database Diagrams Tables System Tables

FileTables External Tables Graph Tables

dbo.Programs

dbo.Students

- Columns
 - ProgramCode (PK, int, not null)
 - ProgramName (varchar(50), null)
 - ProgContactEmail (varchar(50), null)
 - ProgContactName (varchar(50), null)
 - ProgStartDate (date, null)
- Keys
- Constraints
- Triggers
- Indexes
- Statistics

Views External Resources Synonyms Programmability

ShahAgam-AlterSt... - AagamShah (55) ×

```
ALTER TABLE STUDENTS
ADD CONSTRAINT FK_STUDENTS
FOREIGN KEY ([STARTDATE])
REFERENCES PROGRAMS([PROGSTARTDATE])
```

100 % < > Messages

Commands completed successfully.

Completion time: 2024-06-28T04:36:41.5971453-07:00

100 % < > Query executed successfully.

SQL-MBRSVR-ASS1\AAGAM_SQLSVR\ShahAgam (ASHAH550\AagamShah (55)) ShahAgam | 0:00:00 | 0 rows

Ready

Windows Search File Explorer Task View Start Taskbar

9°C Sunny

4:37 AM 6/28/2024 7:37 AM 6/28/2024

2. For each program, we need the program code, program name, program contact email address, program contact name, and program start-date
 - a. A program should be unique by name and start-date

SQL Member Server Assignment2

SQLQuery11.sql - SQL-MBRSVR-ASS1\AAGAM_SQLSVR2.ShahAagam (ASHAH5540\AagamShah (62)) - Microsoft SQL Server Management Studio

```

SET QUOTED_IDENTIFIER ON
GO

CREATE TABLE [dbo].[Programs]
(
    [ProgramCode] [int] IDENTITY(1,1) NOT NULL,
    [ProgramName] [varchar](50) NULL,
    [ProgContactEmail] [varchar](50) NULL,
    [ProgContactName] [varchar](50) NULL,
    [ProgStartDate] [date] NULL
)
CONSTRAINT [PK_Programs] PRIMARY KEY CLUSTERED
(
    [ProgramCode] ASC
)
WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
CONSTRAINT [IX_Programs] UNIQUE NONCLUSTERED
(
    [ProgramName] ASC
)
WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
CONSTRAINT [UK_ProgramName] UNIQUE NONCLUSTERED
(
    [ProgramName] ASC
)
WITH (PAD_INDEX = OFF, STATISTICS_NORECOMPUTE = OFF, IGNORE_DUP_KEY = OFF, ALLOW_ROW_LOCKS = ON, ALLOW_PAGE_LOCKS = ON, OPTIMIZE_FOR_SEQUENTIAL_KEY = OFF) ON [PRIMARY]
GO

```

Connected. (1/1)

Ln 12 Col 1 Ch 1 INS

Activate Windows

SQL-MBRSVR-ASS1\AAGAM_SQLSVR2.ShahAagam (ASHAH5540\AagamShah (62)) ShahAagam | 00:00:00 | 0 rows

Ready

9°C Sunny

4:01 AM 6/28/2024

7:02 AM 6/28/2024

7:02 AM 6/28/2024

3. A student cannot exist without being part of a program Inserting Data into Program table (10 entries)

SQL Member Server Assignment2

ShahAagam-InsertDataProgramTable.sql - SQL-MBRSVR-ASS1\AAGAM_SQLSVR2.ShahAagam (ASHAH5540\AagamShah (53)) - Microsoft SQL Server Management Studio

```

INSERT INTO Programs
VALUES
(
    'Finance', 'Finance@conestogac.com', 'Alpa', '2024-08-27'
)
INSERT INTO Programs
VALUES
(
    'IT', 'IT@conestogac.com', 'Naman', '2024-09-28'
)

```

Completion time: 2024-06-28T05:18:26.0572894-07:00

Query executed successfully.

Ln 54 Col 1 Ch 1 INS

Activate Windows

SQL-MBRSVR-ASS1\AAGAM_SQLSVR2.ShahAagam (ASHAH5540\AagamShah (53)) ShahAagam | 00:00:00 | 0 rows

Ready

14°C Sunny

5:19 AM 6/28/2024

8:19 AM 6/28/2024

SQL Member Server Assignment2

SQLQuery18.sql - SQL-MBRSRV-ASS1\AAGAM_SQLSVR2\ShahAgam (ASHAH5540\AagamShah (52)) - Microsoft SQL Server Management Studio

```
SELECT * FROM Programs
```

ProgramCode	ProgramName	ProgContactEmail	ProgContactName	ProgStartDate
1	Animation	Animation@conestogac.com	Aagam	2024-01-20
2	Bartending	Bartending@conestogac.com	Jinali	2024-02-21
3	Bookkeeping	Bookkeeping@conestogac.com	Sanjay	2024-03-22
4	Business	Business@conestogac.com	Rupal	2024-04-23
5	Ethelician	Ethelician@conestogac.com	Yash	2024-05-24
6	Journalism	Journalism@conestogac.com	Kavita	2024-06-25
7	Paramedic	Paramedic@conestogac.com	Nilesh	2024-07-26
8	Finance	Finance@conestogac.com	Alpa	2024-08-27
9	IT	IT@conestogac.com	Naman	2024-09-28
10	Healthcare	Healthcare@conestogac.com	Manasi	2024-10-29

Activate Windows

Query executed successfully.

Ready

Upcoming Earnings

5:20 AM 6/28/2024

821 AM 6/28/2024

4. A student can only belong to one program at a time.

SQL Member Server Assignment2

SQLQuery19.sql - SQL-MBRSRV-ASS1\AAGAM_SQLSVR2\ShahAgam (ASHAH5540\AagamShah (52)) - Microsoft SQL Server Management Studio

```
VALUES
(
    '981-911-147', 'Rishab', 'Shah', 'Rishab@gmail.com', '4377662788', '2024-08-27'
)
INSERT INTO Students
VALUES
(
    '981-911-148', 'Neshwa', 'Shah', 'Neshwa@gmail.com', '4377662789', '2024-09-28'
)
INSERT INTO Students
VALUES
(
    '981-911-149', 'Rahill', 'Shah', 'Rahill@gmail.com', '4377662710', '2024-10-29'
)
```

(1 row affected)

(1 row affected)

(1 row affected)

Completion time: 2024-06-28T18:22:25.1356069-07:00

Activate Windows

Query executed successfully.

Ready

Temps to drop Sunday

6:22 PM 6/28/2024

9:21 PM 6/28/2024

SQL Member Server Assignment2

File Edit View Query Project Tools Window Help

ShahAgam

SQLQuery19.sql - SQL-MBRSRV-ASS1AAGAM_SQLSVR.ShahAgam (ASHAH540\AagamShah (53)) - Microsoft SQL Server Management Studio

Quick Launch (Ctrl+Q) X

Object Explorer

Databases System Databases Database Snapshots bigpubs2008 ShahAgam Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.Programs dbo.Students Views External Resources Synonyms Programming Service Broker Storage Security

SQLQuery19.sql -..40-AagamShah (53)* SQLQuery18.sql -..40\AagamShah (52)*

```
--select * from Programs
select * from Students
```

Results Messages

StudentID	SocialInsuranceNumber	Firstname	Lastname	EmailAddress	PhoneNumber	StartDate
1	981-911-140	Vallabh	Shah	Vallabh@gmail.com	4377662701	2024-01-20
2	981-911-141	Yoma	Shah	Yoma@gmail.com	4377662702	2024-02-21
3	981-911-142	Jnay	Shah	Jnay@gmail.com	4377662703	2024-03-22
4	981-911-143	Manay	Shah	Manay@gmail.com	4377662704	2024-04-23
5	981-911-144	Bhavesh	Shah	Bhavesh@gmail.com	4377662705	2024-05-24
6	981-911-145	Dhavansh	Shah	Dhavansh@gmail.com	4377662706	2024-06-25
7	981-911-146	Ardhana	Shah	Ardhana@gmail.com	4377662707	2024-07-26
8	981-911-147	Rahab	Shah	Rahab@gmail.com	4377662708	2024-08-27
9	981-911-148	Meshiba	Shah	Meshiba@gmail.com	4377662709	2024-09-28
10	981-911-149	Rahil	Shah	Rahil@gmail.com	4377662710	2024-10-29

Activate Windows

Query executed successfully.

LN 1 Col 1 INS

Ready

Windows Taskbar: 6:24 PM 6/28/2024

Cloudy 17°C

Microsoft Edge, File Explorer, File Manager, Search, Camera, File, Task View, Taskbar icons, Taskbar status: 9:24 PM 6/28/2024

5. There should be at least 10 programs

SQL Member Server Assignment2

File Edit View Query Project Tools Window Help

ShahAgam

SQLQuery20.sql - SQL-MBRSRV-ASS1AAGAM_SQLSVR.ShahAgam (ASHAH540\AagamShah (64)) - Microsoft SQL Server Management Studio

Quick Launch (Ctrl+Q) X

Object Explorer

Databases System Databases Database Snapshots bigpubs2008 ShahAgam Database Diagrams Tables System Tables FileTables External Tables Graph Tables dbo.Programs dbo.Students Views External Resources Synonyms Programming Service Broker Storage Security

SQLQuery20.sql -..40-AagamShah (64)* SQLQuery19.sql -..40\AagamShah (53)*

```
SELECT * FROM Programs
```

Results Messages

ProgramCode	ProgramName	ProgContactEmail	ProgContactName	ProgStartDate
1	Animation	Animation@conestogac.com	Aagam	2024-01-20
2	Bartending	Bartending@conestogac.com	Jinal	2024-02-21
3	Bookkeeping	Bookkeeping@conestogac.com	Sanjay	2024-03-22
4	Business	Business@conestogac.com	Rupal	2024-04-23
5	Esthetician	Esthetician@conestogac.com	Yash	2024-05-24
6	Journalism	Journalism@conestogac.com	Kavay	2024-06-25
7	Paramedic	Paramedic@conestogac.com	Nilesh	2024-07-26
8	Finance	Finance@conestogac.com	Alpa	2024-08-27
9	IT	IT@conestogac.com	Naman	2024-09-28
10	Healthcare	Healthcare@conestogac.com	Manasi	2024-10-29

Activate Windows

Query executed successfully.

LN 1 Col 23 Ch 23 INS

Ready

Windows Taskbar: 6:26 PM 6/28/2024

Upcoming Earnings 9:27 PM 6/28/2024

6. There should be at least 20 students 20 students in students table.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure, including the 'Students' table under the 'dbo' schema. The central pane displays the results of a query:

```
SELECT * FROM Students
```

The results table contains 20 rows of student data:

StudentID	SocialInsuranceNumber	Firstname	Lastname	EmailAddress	PhoneNumber	StartDate
1	981-911-140	Valbhav	Shah	Valbhav@gmail.com	4377662701	2024-01-20
2	981-911-141	Vyoma	Shah	Vyoma@gmail.com	4377662702	2024-02-21
3	981-911-142	Jinay	Shah	Jinay@gmail.com	4377662703	2024-03-22
4	981-911-143	Manay	Shah	Manay@gmail.com	4377662704	2024-04-23
5	981-911-144	Bhavesh	Shah	Bhavesh@gmail.com	4377662705	2024-05-24
6	981-911-145	Dhavan	Shah	Dhavan@gmail.com	4377662706	2024-06-25
7	981-911-146	Archana	Shah	Archana@gmail.com	4377662707	2024-07-26
8	981-911-147	Rishab	Shah	Rishab@gmail.com	4377662708	2024-08-27
9	981-911-148	Mehswa	Shah	Mehswa@gmail.com	4377662709	2024-09-28
10	981-911-149	Rahil	Shah	Rahil@gmail.com	4377662710	2024-10-29

At the bottom of the results pane, it says "Query executed successfully." The status bar at the bottom right shows the connection details: "SQL-MBRSRV-ASS1\AAGAM_SQLSVR2.ShahAgam (ASHAH5540)\AagamShah (57)" and the date and time: "6/30/2024 00:00:00".

Number of students in students table is 20

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure, including the 'Students' table under the 'dbo' schema. The central pane displays the results of a query:

```
SELECT COUNT(*) FROM Students
```

The results table contains 1 row with the value 20:

(No column name)
20

At the bottom of the results pane, it says "Query executed successfully." The status bar at the bottom right shows the connection details: "SQL-MBRSRV-ASS1\AAGAM_SQLSVR2.ShahAgam (ASHAH5540)\AagamShah (53)" and the date and time: "7/1/2024 00:00:00".

7. Create a stored procedure for adding students

```

CREATE PROCEDURE StudentsPro
    @SocialInsuranceNumber CHAR(11),
    @FirstName VARCHAR(50),
    @LastName VARCHAR(50),
    @EmailAddress VARCHAR(50),
    @PhoneNumber VARCHAR(50),
    @StartDate DATE
AS
BEGIN
    INSERT INTO Students
    (
        SocialInsuranceNumber, FirstName, LastName, EmailAddress, PhoneNumber, StartDate
    )
    VALUES
    (
        @SocialInsuranceNumber, @FirstName, @LastName, @EmailAddress, @PhoneNumber, @StartDate
    )
END

```

Completion time: 2024-06-30T16:55:38.3305800-07:00

Query executed successfully.

Inserting students data using StudentsPro Procedure

```

SELECT * FROM Students

```

```

EXEC dbo.StudentsPro '981-911-138', 'Rajendra', 'Shah', 'Rajendra@gmail.com', '4377662691', '2024-01-17'
EXEC dbo.StudentsPro '981-911-131', 'Bhanuben', 'Shah', 'Bhanuben@gmail.com', '4377662692', '2024-01-18'
EXEC dbo.StudentsPro '981-911-132', 'Ushaben', 'Shah', 'Ushaben@gmail.com', '4377662693', '2024-01-19'
EXEC dbo.StudentsPro '981-911-133', 'Giravental', 'Shah', 'Giravental@gmail.com', '4377662694', '2024-01-17'
EXEC dbo.StudentsPro '981-911-134', 'Keval', 'Shah', 'Keval@gmail.com', '4377662695', '2024-01-18'
EXEC dbo.StudentsPro '981-911-135', 'Parth', 'Shah', 'Parth@gmail.com', '4377662696', '2024-01-19'
EXEC dbo.StudentsPro '981-911-136', 'Rushabh', 'Shah', 'Rushabh@gmail.com', '4377662697', '2024-01-17'
EXEC dbo.StudentsPro '981-911-137', 'Dharav', 'Shah', 'Dharav@gmail.com', '4377662698', '2024-01-18'
EXEC dbo.StudentsPro '981-911-138', 'Vidit', 'Shah', 'Vidit@gmail.com', '4377662699', '2024-01-19'
EXEC dbo.StudentsPro '981-911-139', 'Hetvi', 'Shah', 'Hetvi@gmail.com', '4377662700', '2024-01-17'

```

Completion time: 2024-06-30T19:47:15.0638904-07:00

Query executed successfully.

8. Create a stored procedure for adding programs

The screenshot shows the Microsoft SQL Server Management Studio interface. A new query window titled 'ShahAagam-ProcedurePrograms.sql - SQL-MBRSVR-ASS1AAGAM_SQLSVR2.ShahAagam (ASHAH5540\AagamShah (59)) - Microsoft SQL Server Management Studio' is open. The code in the query editor is:

```

CREATE PROCEDURE ProgramsPro
    @ProgName VARCHAR(50),
    @ProgContactEmail VARCHAR(50),
    @ProgContactName VARCHAR(50),
    @ProgStartDate DATE
AS
BEGIN
    INSERT INTO Programs
    (
        ProgName,ProgContactEmail,ProgContactName,ProgStartDate
    )
    VALUES
    (
        @ProgName,@ProgContactEmail,@ProgContactName,@ProgStartDate
    )
END

```

The status bar at the bottom right indicates 'Query executed successfully.' and 'Completion time: 2024-06-30T17:13:46.7361799-07:00'. The system tray shows the date and time as 6/30/2024.

Inserting data using ProgramsPro procedure

The screenshot shows the Microsoft SQL Server Management Studio interface. A new query window titled 'SQLQuery2.sql - SQL-MBRSVR-ASS1AAGAM_SQLSVR2.ShahAagam (ASHAH5540\AagamShah (64)) - Microsoft SQL Server Management Studio' is open. The code in the query editor is:

```

--SELECT * FROM Programs

EXEC dbo.ProgramPro 'Arts','Arts@conestogac.com','Nihar','2024-01-17'
EXEC dbo.ProgramPro 'Robotics','Robotics@conestogac.com','Jay','2024-01-18'
EXEC dbo.ProgramPro 'Dental','Dental@conestogac.com','Mihir','2024-01-19'

```

The status bar at the bottom right indicates 'Query executed successfully.' and 'Completion time: 2024-06-30T19:27:43.1196799-07:00'. The system tray shows the date and time as 6/30/2024.

9. Create an index on the students' names and email address

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure. The central pane displays a T-SQL script for creating an index named 'IndexStudents' on the 'Students' table, specifically on the columns 'Firstname', 'Lastname', and 'Email1Address'. The status bar at the bottom indicates 'Query executed successfully.'

```

CREATE INDEX IndexStudents
ON
    Students
(
    Firstname,
    Lastname,
    Email1Address
)
--select * from Students

```

10. Create an index on the program name, contact name, and program email

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure. The central pane displays a T-SQL script for creating an index named 'IndexPrograms' on the 'Programs' table, specifically on the columns 'ProgramName', 'ProgContactName', and 'ProgContactEmail'. The status bar at the bottom indicates 'Query executed successfully.'

```

CREATE INDEX IndexPrograms
ON
    Programs
(
    ProgramName,
    ProgContactName,
    ProgContactEmail
)
--select * from Programs

```

11. Create a view that leverages these indexed columns to display a students and their respective programs

- a. not show social insurance number in this view

```

CREATE VIEW StudentsProgView
AS
    SELECT
        Students.Firstname, Students.Lastname, Students.EmailAddress,
        Programs.ProgramName, Programs.ProgContactName, Programs.ProgContactEmail
    FROM
        Programs
    INNER JOIN Students
    ON
        (
            PROGRAMS.ProgStartDate = Students.StartDate
        )

```

Commands completed successfully.

Completion time: 2024-07-01T05:36:33.0514849-07:00

View without Social Insurance Number details.

```

SELECT * FROM StudentsProgView;

```

	Firstname	Lastname	EmailAddress	ProgramName	ProgContactName	ProgContactEmail
1	Vabhab	Shah	Vabhab@gmail.com	Animation	Aagam	Animation@conestogac.com
2	Yvona	Shah	Yvona@gmail.com	Bartending	Jinal	Bartending@conestogac.com
3	Jnay	Shah	Jnay@gmail.com	Bookkeeping	Sanjay	Bookkeeping@conestogac.com
4	Manay	Shah	Manay@gmail.com	Business	Rupal	Business@conestogac.com
5	Bhavesh	Shah	Bhavesh@gmail.com	Esthetician	Yash	Esthetician@conestogac.com
6	Dhavan	Shah	Dhavan@gmail.com	Journalism	Kevan	Journalism@conestogac.com
7	Archana	Shah	Archana@gmail.com	Paramedic	Nilesh	Paramedic@conestogac.com
8	Rahab	Shah	Rahab@gmail.com	Finance	Alpa	Finance@conestogac.com
9	Mehiwa	Shah	Mehiwa@gmail.com	IT	Naman	IT@conestogac.com
10	Rahil	Shah	Rahil@gmail.com	Healthcare	Manasi	Healthcare@conestogac.com
11	Rajendra	Shah	Rajendra@gmail.com	Arts	Nihar	Arts@conestogac.com
12	Bhanub.	Shah	Bhanub@gmail.com	Robotics	Jay	Robotics@conestogac.com
13	Ushaben	Shah	Ushaben@gmail.com	Dental	Mhr	Dental@conestogac.com
14	Gunvan...	Shah	Gunvantai@gmail....	Arts	Nihar	Arts@conestogac.com
15	Keval	Shah	Keval@gmail.com	Robotics	Jay	Robotics@conestogac.com
16	Parth	Shah	Parth@gmail.com	Dental	Mhr	Dental@conestogac.com
17	Rushabh	Shah	Rushabh@gmail.com	Arts	Nihar	Arts@conestogac.com

Query executed successfully.

12. Populate an initial list of programs using a script

ShahAagam-PopulateProgramsUsingScript.sql - SQL-MBRSVR-ASS1\AAGAM_SQLSVR2.ShahAagam (ASHAH5540\AagamShah (55)) - Microsoft SQL Server Management Studio

```

USE [ShahAagam]
GO
SELECT [ProgramCode]
      ,[ProgramName]
      ,[ProgContactEmail]
      ,[ProgContactName]
      ,[ProgStartDate]
   FROM [dbo].[Programs]
  
```

Results

ProgramCode	ProgramName	ProgContactEmail	ProgContactName	ProgStartDate
1	Animation	Animation@conestogac.com	Aagam	2024-01-20
2	Bartending	Bartending@conestogac.com	Jinali	2024-02-21
3	Bookkeeping	Bookkeeping@conestogac.com	Sanjay	2024-03-22
4	Business	Business@conestogac.com	Rupal	2024-04-23
5	Ethetician	Ethetician@conestogac.com	Yash	2024-05-24
6	Journalism	Journalism@conestogac.com	Kaivan	2024-06-25
7	Paramedic	Paramedic@conestogac.com	Nilesh	2024-07-26
8	Finance	Finance@conestogac.com	Alpa	2024-08-27
9	IT	IT@conestogac.com	Naman	2024-09-28

Query executed successfully.

13. Populate an initial list of students using a script

ShahAagam-PopulateStudentsUsingScript.sql - SQL-MBRSVR-ASS1\AAGAM_SQLSVR2.ShahAagam (ASHAH5540\AagamShah (55)) - Microsoft SQL Server Management Studio

```

USE [ShahAagam]
GO
SELECT [StudentID]
      ,[SocialInsuranceNumber]
      ,[Firstname]
      ,[Lastname]
      ,[EmailAddress]
      ,[PhoneNumber]
      ,[StartDate]
   FROM [dbo].[Students]
  
```

Results

StudentID	SocialInsuranceNumber	Firstname	Lastname	EmailAddress	PhoneNumber	StartDate
1	981-911-140	Vaibhav	Shah	Vaibhav@gmail.com	4377662701	2024-01-20
2	981-911-141	Vyoma	Shah	Vyoma@gmail.com	4377662702	2024-02-21
3	981-911-142	Jinay	Shah	Jinay@gmail.com	4377662703	2024-03-22
4	981-911-143	Manay	Shah	Manay@gmail.com	4377662704	2024-04-23
5	981-911-144	Bhavesh	Shah	Bhavesh@gmail.com	4377662705	2024-05-24
6	981-911-145	Dhavan	Shah	Dhavan@gmail.com	4377662706	2024-06-25
7	981-911-146	Archana	Shah	Archana@gmail.com	4377662707	2024-07-26
8	981-911-147	Rishab	Shah	Rishab@gmail.com	4377662708	2024-08-27

Query executed successfully.

14. Name your database with your LastnameFirstname. Make sure your mdf and ldf use your name too.

→ ShahAagam

