

# COMP 557 - Datacenter Cloud Computing

## Lab 2

Full Name

**Touhidul Islam Chayan**

Student ID

**10307085**

Section

**Section-1**



**FLEMING**

## Questions:

Please provide your answers below each question. Do not remove questions and their marks from this template.

### Part 1: Create a Microsoft Azure Database

The screenshot shows the Microsoft Azure portal interface. At the top, there's a navigation bar with the Microsoft Azure logo and a search bar. Below the navigation bar, the breadcrumb trail reads: "All services > Microsoft.SQLDatabase.newDatabaseNewServer\_9ec380c1d06b439fb6c21 | Overview". The main heading is "db-c557-touhidulislamchayan (srv-c557-touhidulislamchayan/db-c557-touhidulislamchayan)" with a sub-label "SQL database".

On the left, there's a sidebar with a search bar and a list of navigation items: Overview, Activity log, Tags, Diagnose and solve problems, Query editor (preview), Mirror database in Fabric (preview), Settings, Data management, Integrations, Power Platform, Security, Intelligent performance, Monitoring, Automation, and Help.

The main content area has a top bar with a search bar and action buttons: Copy, Restore, Export, Set server firewall, Delete, Connect with..., and Feedback. Below this is a notification banner: "Mirror databases in Microsoft Fabric: Easily replicate your existing databases in Fabric, and help your team achieve streamlined ETL and operational analytics goals. [Learn more](#)".

The "Essentials" section is expanded, showing a table of database properties:

Property	Value
Resource group	<a href="#">rg-c557-touhidulislamchayan</a>
Status	Online
Location	Canada Central
Subscription	<a href="#">(move)</a> <a href="#">Azure for Students</a>
Subscription ID	855b6171-7c6b-40b3-a723-29b9745aa809
Tags	<a href="#">(edit)</a> <a href="#">Add tags</a>
Server name	<a href="#">srv-c557-touhidulislamchayan.database.windows.net</a>
Elastic pool	<a href="#">No elastic pool</a>
Connection strings	<a href="#">Show database connection strings</a>
Pricing tier	Basic
Earliest restore point	No restore point available

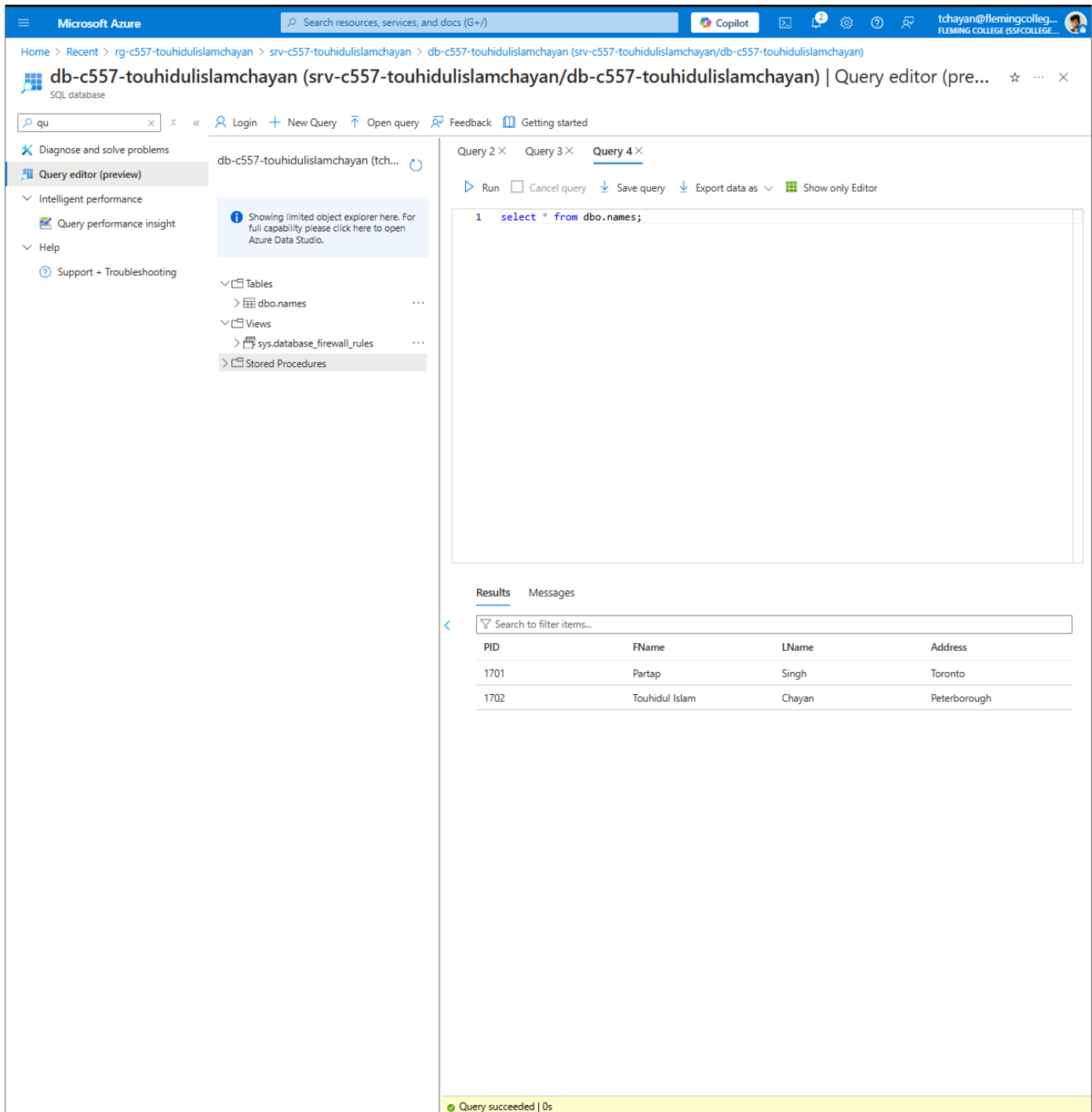
Below the table is a tabbed interface with "Getting started" selected. The "Start working with your database" section contains the text: "Connect to your database and start working with data with a few simple steps. [Learn more](#)".

There are three main action cards:

- Configure access**: Configure network access to your SQL server. [Learn more](#). Button: [Configure](#)
- Connect to application**: Use connection strings to connect to your SQL database from your applications and favorite tools. Button: [See connection strings](#)
- Start developing**: Work in your database by using tools to add, modify and query data. [Compare tools](#). Buttons: [Open Azure Data Studio](#), [Open in Visual Studio](#), [Open in Visual Studio Code](#)

At the bottom, there's a section for **Mirror database in Fabric**: Replicate existing databases in Fabric, and help your team achieve streamlined ETL and operational analytics goals. [Learn more](#)

## Part 2: Execute SQL Queries on Microsoft Azure Database



The screenshot displays the Microsoft Azure portal interface for a SQL database. The top navigation bar shows the user's profile and the database name: **db-c557-touhidulislamchayan (srv-c557-touhidulislamchayan/db-c557-touhidulislamchayan)**. The left sidebar contains the **Query editor (preview)** section, which includes a search bar and a list of database objects: **Tables** (containing **dbo.names**), **Views** (containing **sys.database\_firewall\_rules**), and **Stored Procedures**. The main area shows the query editor with the following SQL query:

```
1 select * from dbo.names;
```

Below the query editor, the **Results** tab is active, displaying the query results in a table format. The table has 4 columns: **PID**, **FName**, **LName**, and **Address**. The results are as follows:

PID	FName	LName	Address
1701	Partap	Singh	Toronto
1702	Touhidul Islam	Chayan	Peterborough

At the bottom of the interface, a status bar indicates: **Query succeeded | 0s**.

## Part 3: Create and Access an Azure Application

Week 3 - COMP 557-006


Microsoft.Web-WebApp

hostingstart.html - www

Mail - Touhidul Islam Ch


Microsoft Azure App Ser


app-c557-touhidulislamchayan-eug0hmb4csbfavd8.canadacentral-01.azurewebsites.net

 Microsoft Azure

### Touhidul Islam Chayan welcomes you to Cloud Computing at Fleming College

Your web app is live, but we don't have your content yet. If you've already deployed, it could take up to 5 minutes for your content to show up, so come back soon.



 Supporting Node.js, Java, .NET and more

Haven't deployed yet?

Use the deployment center to publish code or set up continuous deployment.

[Deployment center](#)

Starting a new web site?

Follow our Quickstart guide to get a web app ready quickly.

[Quickstart](#)

#### Part 4: Research Cloud Services Other Than SaaS, IaaS, and PaaS

Cite and reference your answer to the question below using APA (7th edition) format. Provide reference list entries under “References” on the next page.

Describe **two** Cloud services other than Software as a Service (SaaS), Infrastructure as a Service (IaaS), and Platform as a Service (PaaS). In your answer, include the name of at least one company that offers these additional Cloud services. (1.5 marks)

#### **Answer**

- 1) FaaS (Function as a Service) - This means that anyone can take a specific function of the cloud to work on their project. There are a lot of pieces when you build an API with servers. FaaS lets you take those pieces without creating the whole server.

Example –

- a. AWS Lambda
  - b. UploadThing
- 2) BaaS (Backup as a Service) - This means as it says, you can backup your data (important or any) into any cloud based storage system. These cloud storages are very secure too.

Example –

- a. Acronis
- b. Dropbox

#### **References**

- 1) Amazon Web Services. (n.d.). *AWS Lambda*. Retrieved January 16, 2025, from <https://aws.amazon.com/lambda/>
- 2) Acronym Solutions. (n.d.). *Backup as a Service (BaaS)*. Retrieved January 16, 2025, from <https://acronymsolutions.com/solutions/cloud/baas/>