IT4090
Cloud Computing
4th Year, 2nd Semester

Azure Lab 5

Create a single database - Azure SQL Database

Submitted to

Sri Lanka Institute of Information Technology

IT21510380

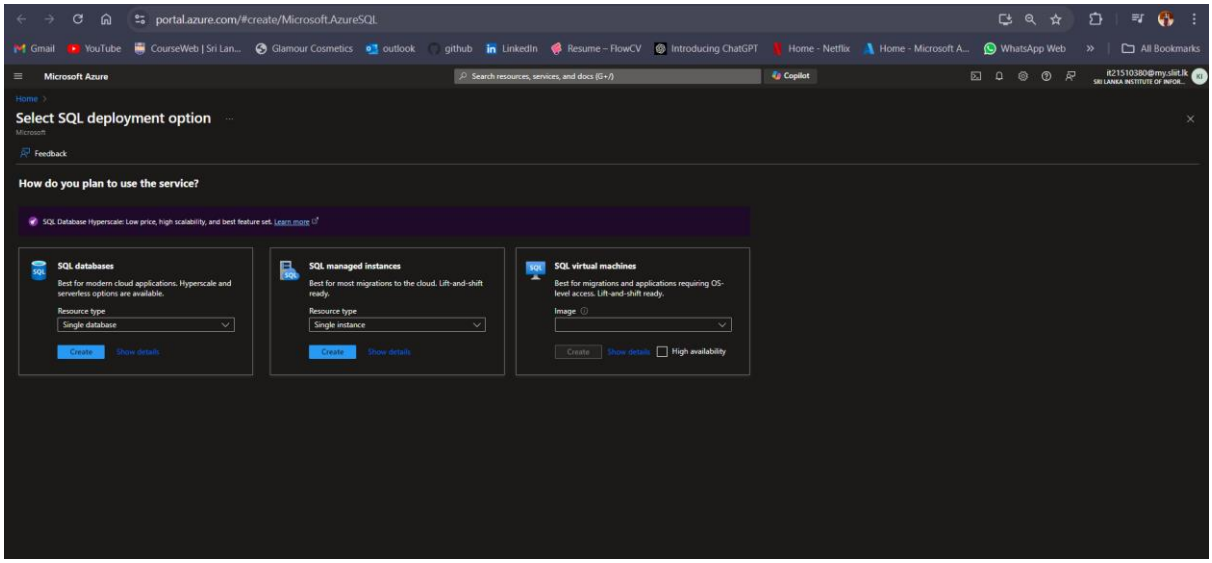
In partial fulfillment of the requirements for the

Bachelor of Science Special Honors Degree in Information Technology

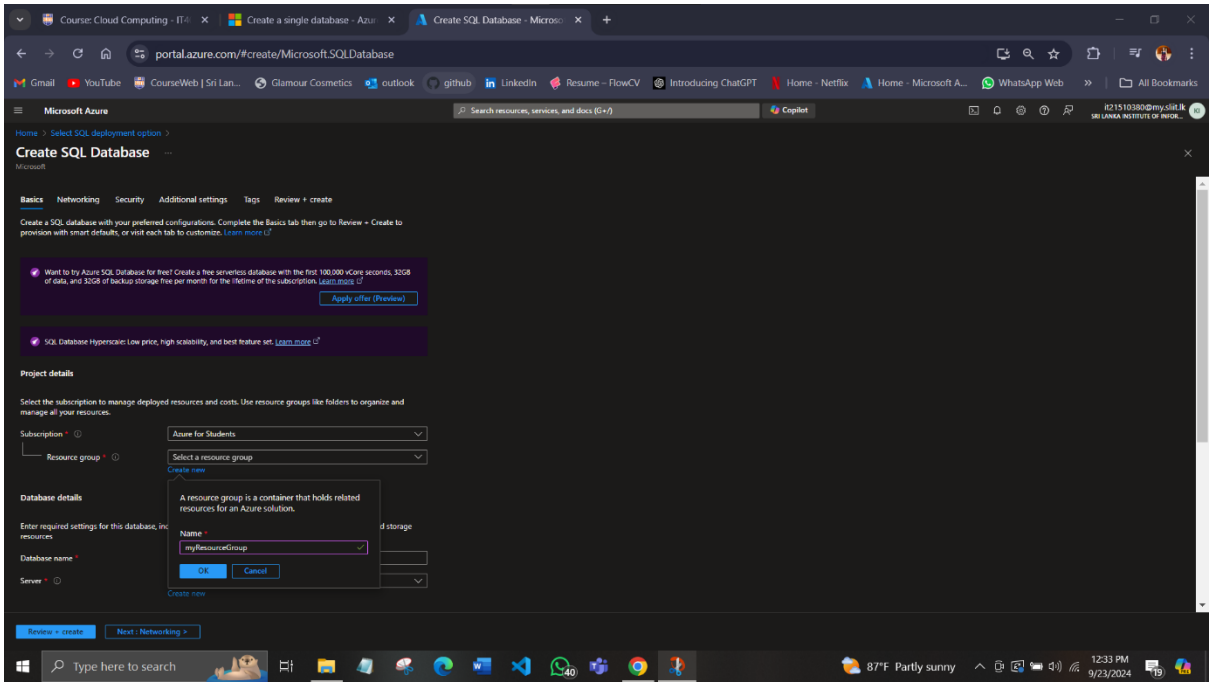
September/26/2024

Create a single database

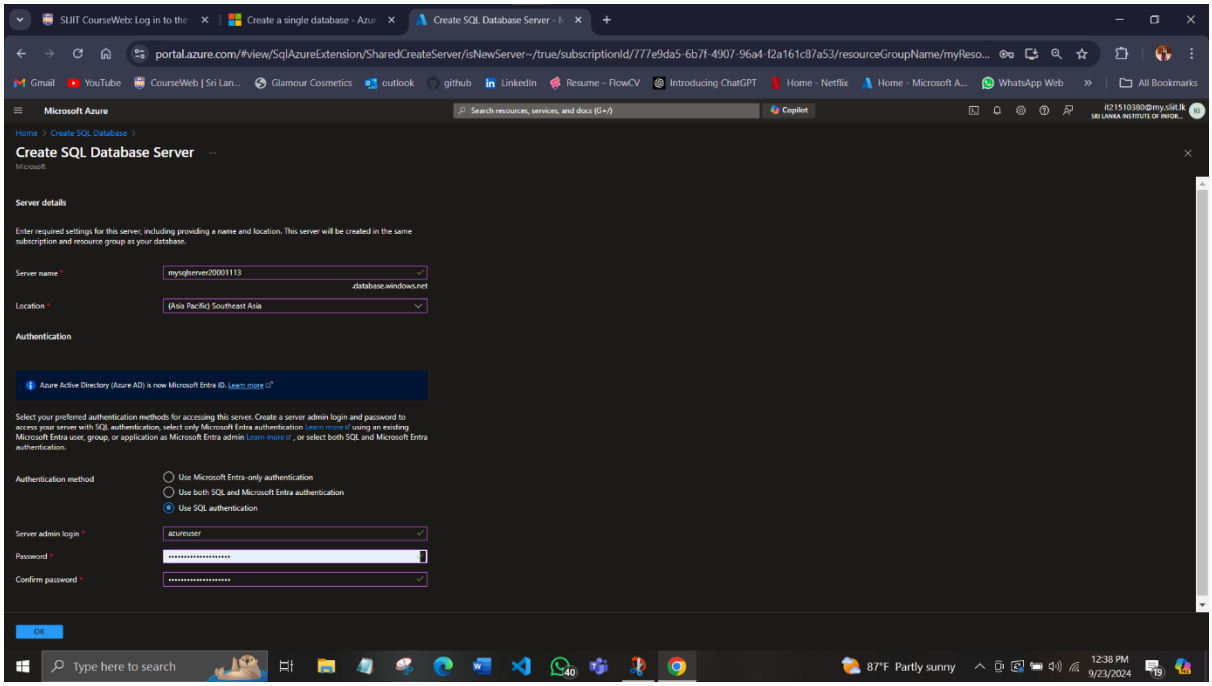
1. Browse to the Select **SQL Deployment option** page.
2. Under **SQL databases**, leave the **Resource type** set to **Single database**, and select **Create**.



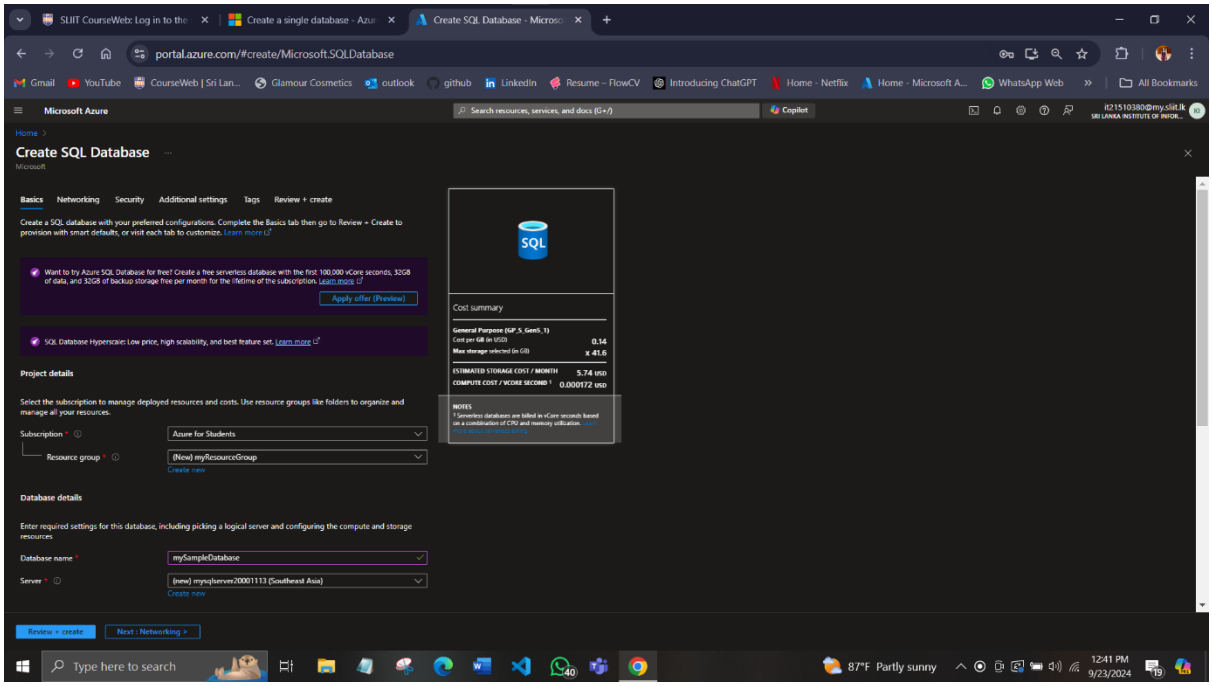
3. On the **Basics** tab of the **Create SQL Database** form, under **Project details**, select the desired Azure **Subscription**.
4. For **Resource group**, select **Create new**, enter *myResourceGroup*, and select **OK**.



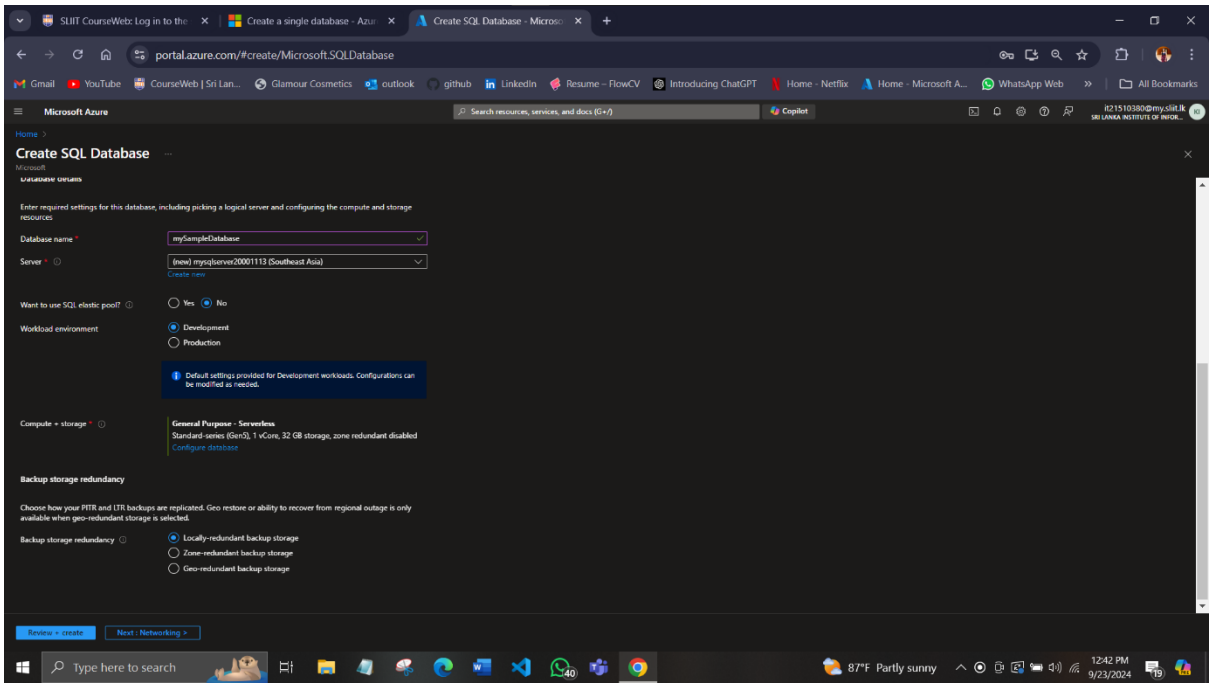
5. For the **Database name**, enter *mySampleDatabase*.
6. For **Server**, select **Create New**, and fill out the **New server.**
    - Server name: Enter *mysqlserver*
    - Location: Select a location from the dropdown list.
    - Authentication method: Select Use SQL authentication.
    - Server admin login: Enter *azureuser*.
    - Password: Enter a password that meets requirements, and enter it again in the Confirm password field.
7. Select OK.

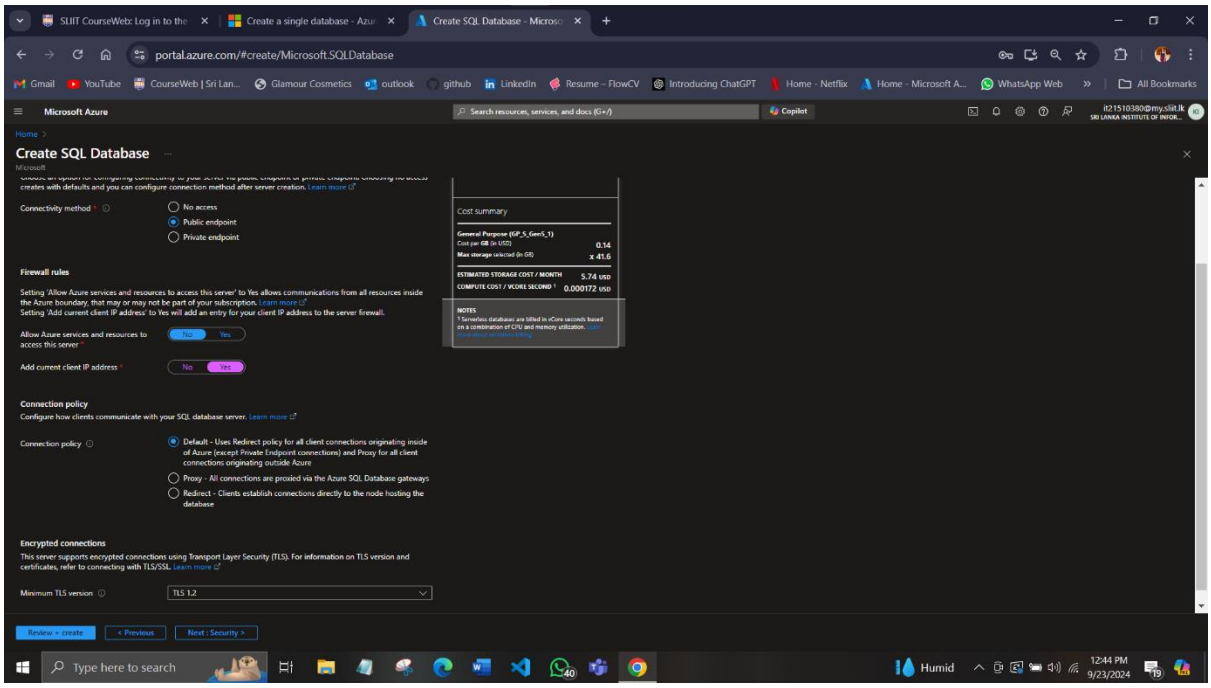


8. Leave **Want to use SQL elastic pool** set to **No**.
9. For **Workload environment**, specify **Development** for this exercise.
10. Under **Compute + storage**, select **Configure database**.
11. This quickstart uses a serverless database, so leave **Service tier** set to **General Purpose (Most budget-friendly, serverless compute)** and set **Compute tier** to **Serverless**. Select **Apply**.
12. Under **Backup storage redundancy**, choose a redundancy option for the storage account where your backups will be saved. To learn more, see backup storage redundancy.
13. Select **Next: Networking** at the bottom of the page.

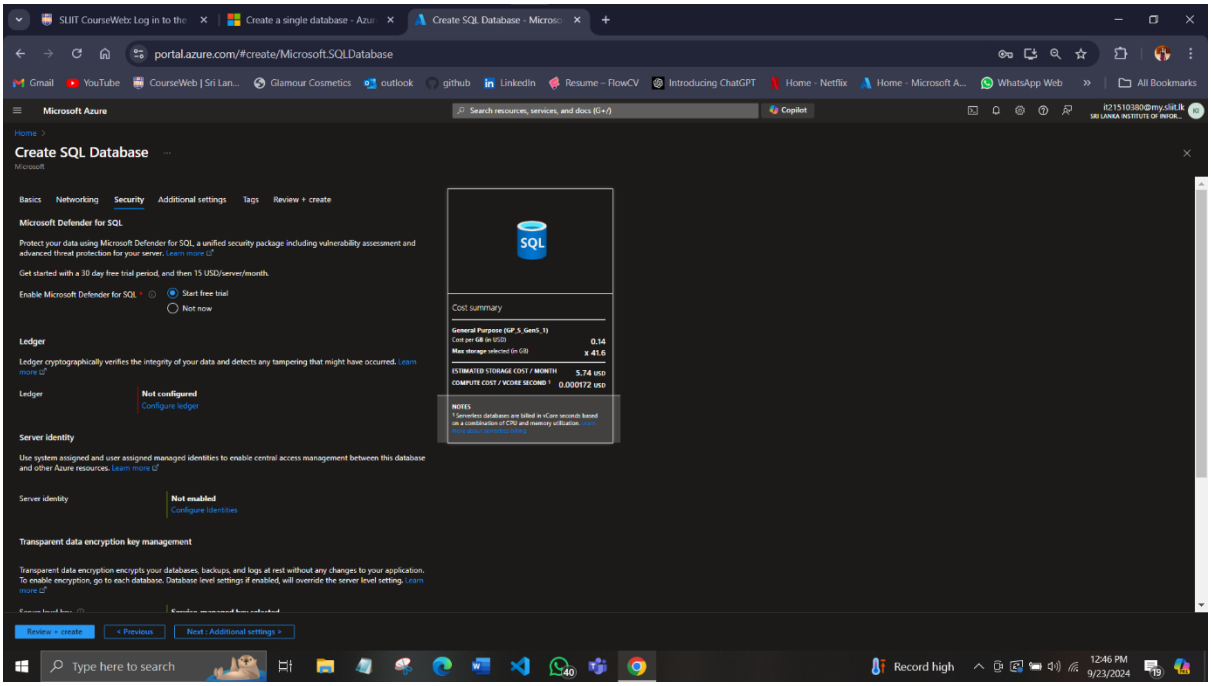


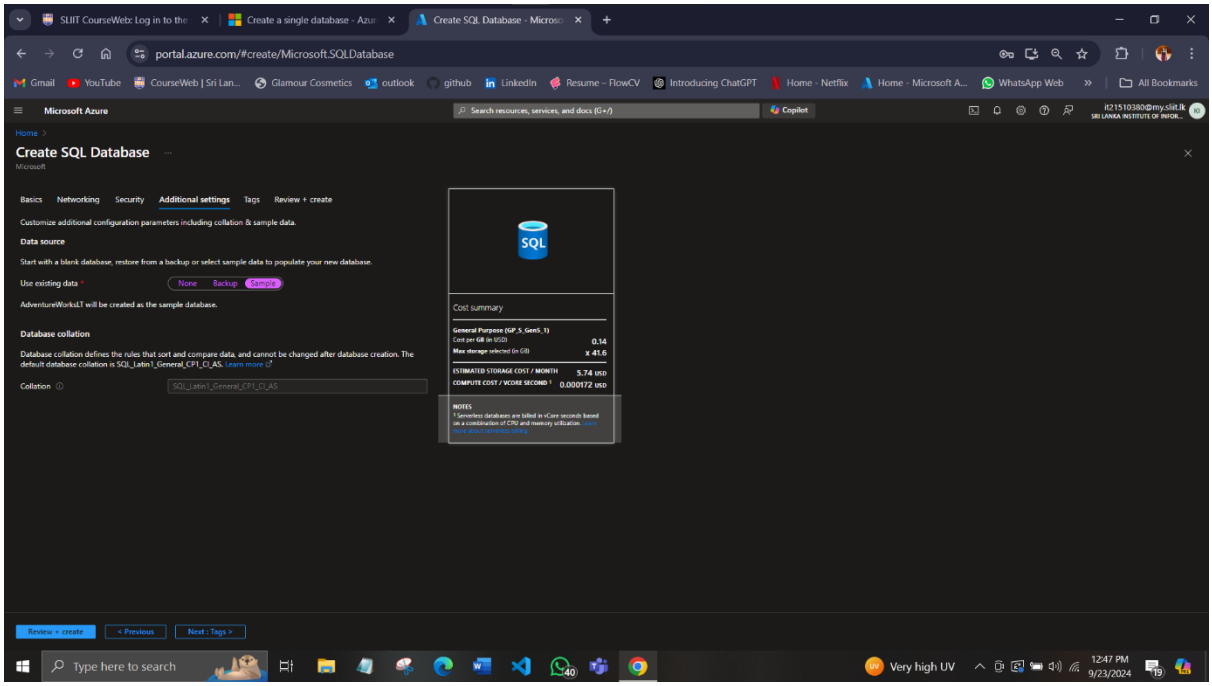
14. On the **Networking** tab, for the **Connectivity method**, select the **Public endpoint**.
15. For **Firewall rules**, set **Add current client IP address** to **Yes**. Leave **Allow Azure services and resources to access this server** set to **No**.
16. Under **Connection policy**, choose the **Default** connection policy, and leave the **Minimum TLS version** at the default of TLS 1.2.

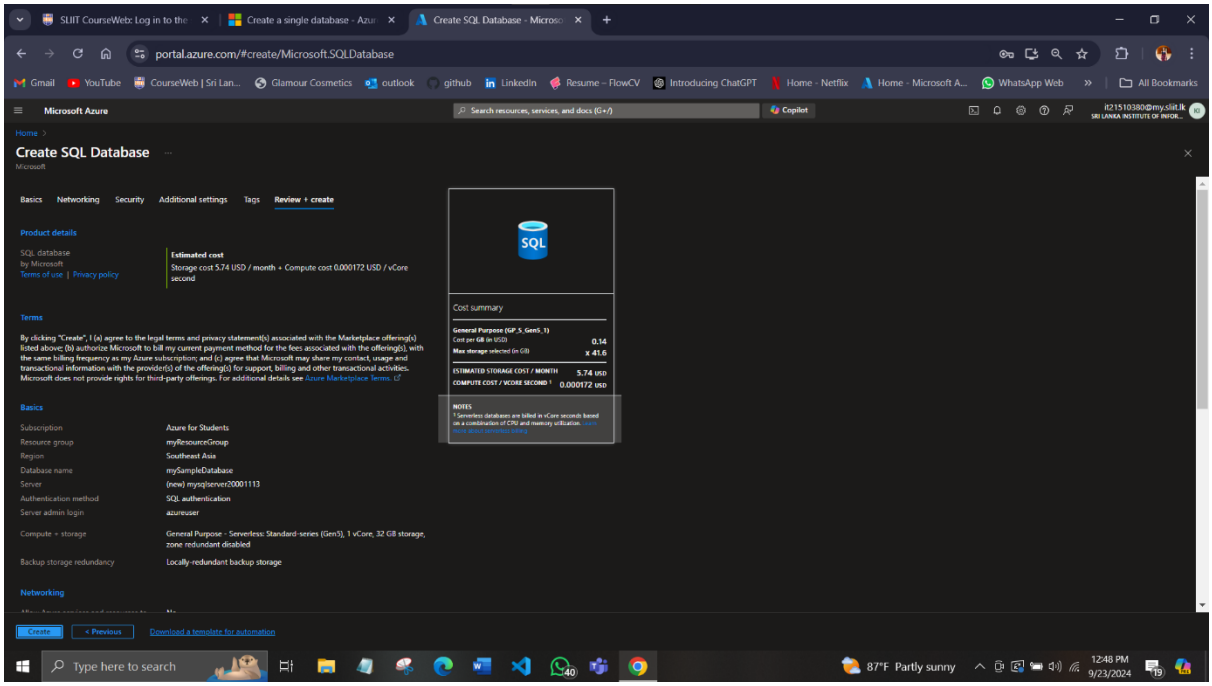


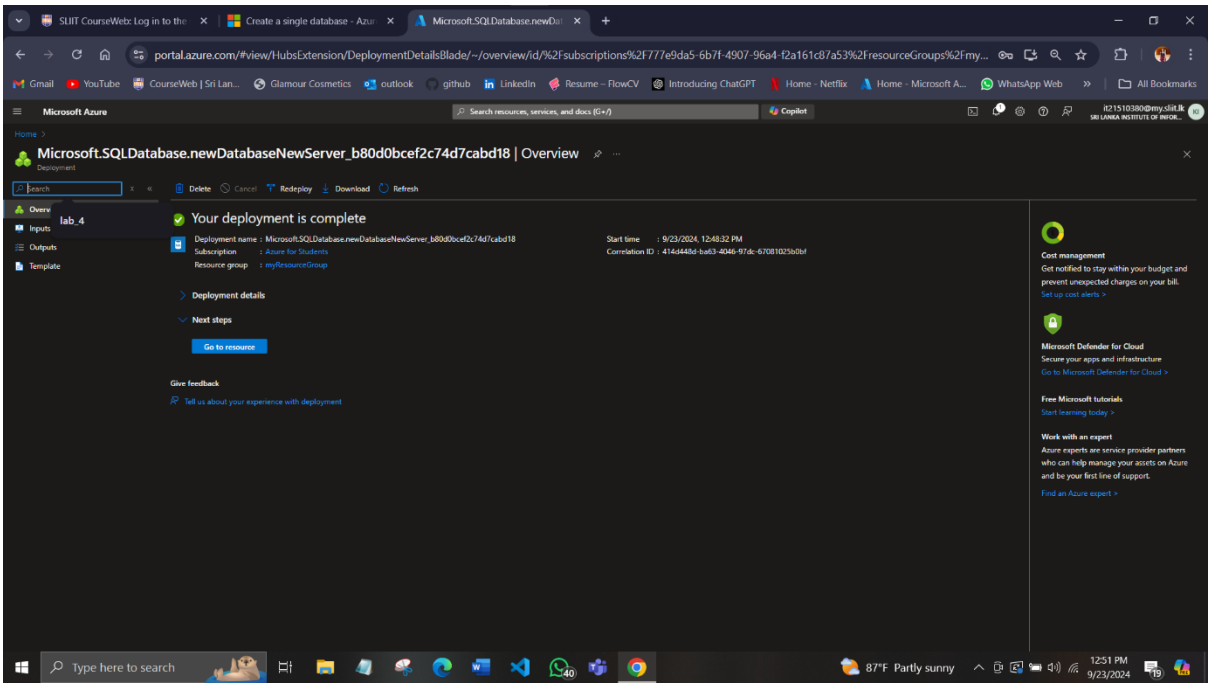


17. Select **Next: Security** at the bottom of the page.
18. On the **Security** page, Select **Next: Additional settings** at the bottom of the page.
19. On the **Additional settings** tab, in the **Data source** section, for **Use existing data**, select **Sample**.
20. Select **Review + create** at the bottom of the page:
21. On the **Review + create** page, after reviewing, select **Create**.



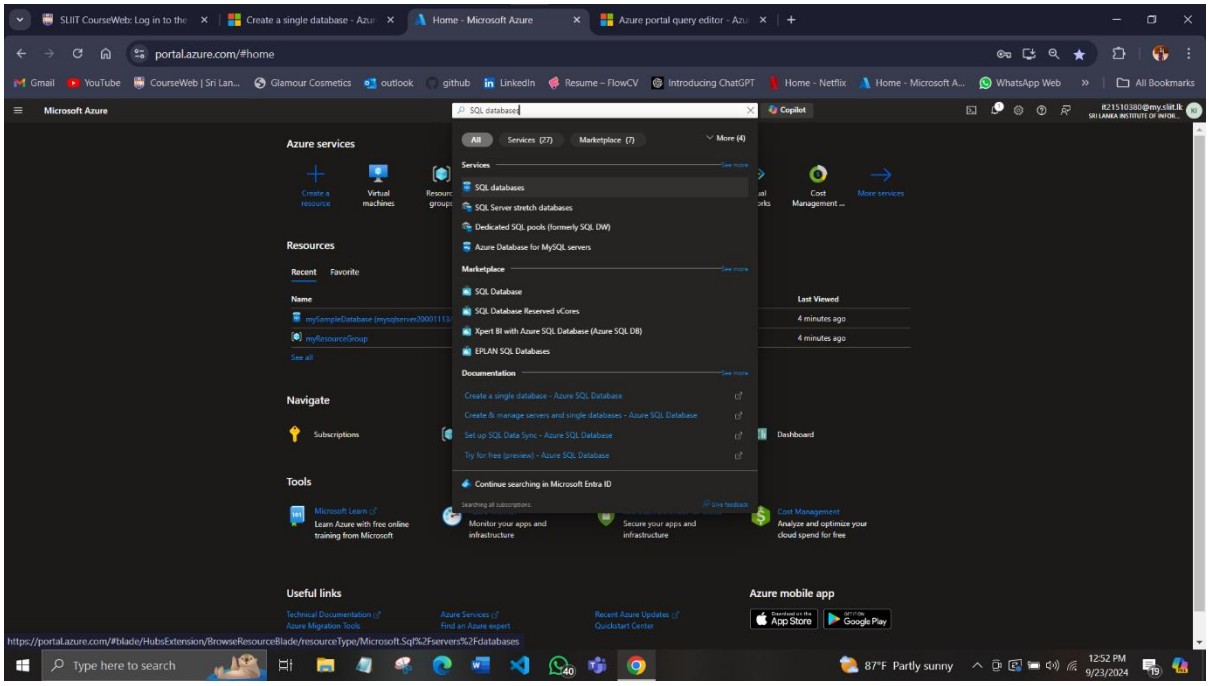

Create SQL Database
Basics Networking Security Additional settings Tags Review + create
Customize additional configuration parameters including collation & sample data.
Data source
Start with a blank database, restore from a backup or select sample data to populate your new database.
Use existing data *
None Backup Sample
AdventureWorksLT will be created as the sample database.
Database collation
Database collation defines the rules that sort and compare data, and cannot be changed after database creation. The default database collation is SQL_Latin1_General_CP1_CI_AS. Learn more
Collation
SQL_Latin1_General_CP1_CI_AS
Cost summary
General Purpose (GP_S_Gen5_1)
Cost per GB (in USD) 0.14
Max storage selected (in GB) x 41.6
ESTIMATED STORAGE COST / MONTH 5.74 USD
COMPUTE COST / VCORE SECOND 0.000172 USD
NOTES
Review + create
< Previous
Next : Tags >

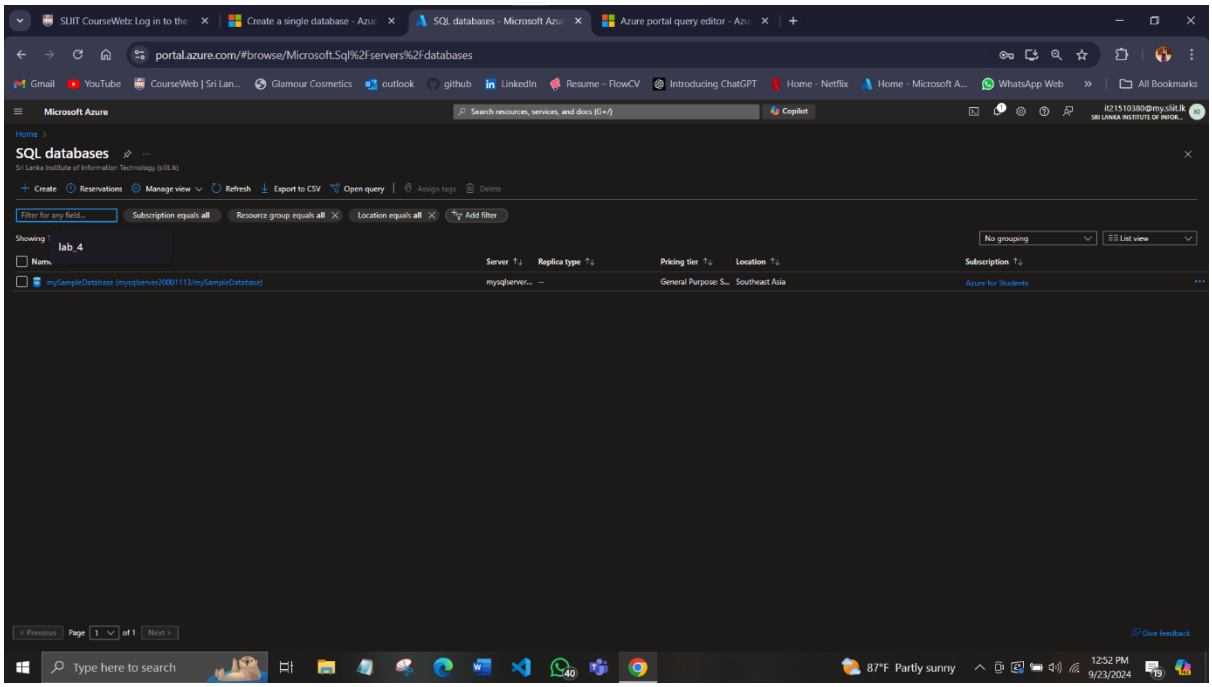

Create SQL Database
Basics Networking Security Additional settings Tags Review + create
Product details
SQL database
by Microsoft
Terms of use | Privacy policy
Estimated cost
Storage cost 5.74 USD / month + Compute cost 0.000172 USD / vCore second
Terms
By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. For additional details see Azure Marketplace Terms.
Basics
Subscription Azure for Students
Resource group myResourceGroup
Region Southeast Asia
Database name mySampleDatabase
Server (new) mysqlserver20001113
Authentication method SQL authentication
Server admin login azureuser
Compute + storage General Purpose - Serverless: Standard-series (Gen5), 1 vCore, 32 GiB storage, zone redundant disabled
Backup storage redundancy Locally-redundant backup storage
Networking
Cost summary
General Purpose (GP_S_Gen5_1)
Cost per GB (in USD) 0.14
Max storage selected (in GB) x 41.6
ESTIMATED STORAGE COST / MONTH 5.74 USD
COMPUTE COST / VCORE SECOND 0.000172 USD
NOTES
Create
< Previous
Download a template for automation

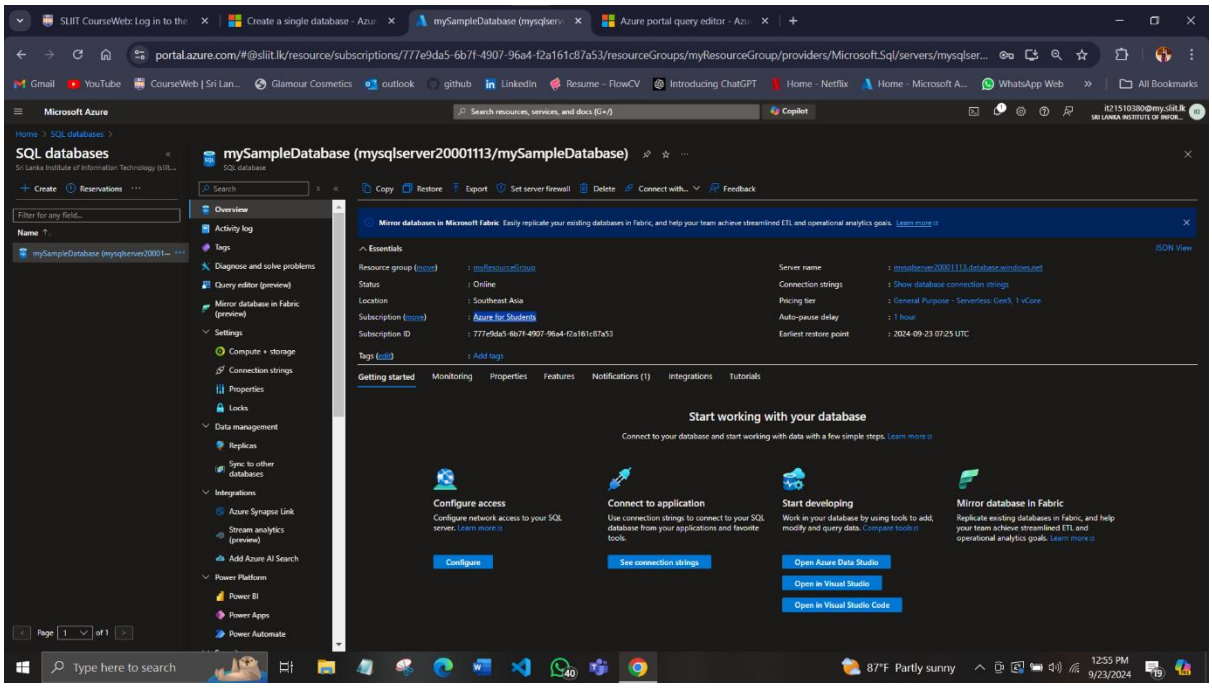


Query the database

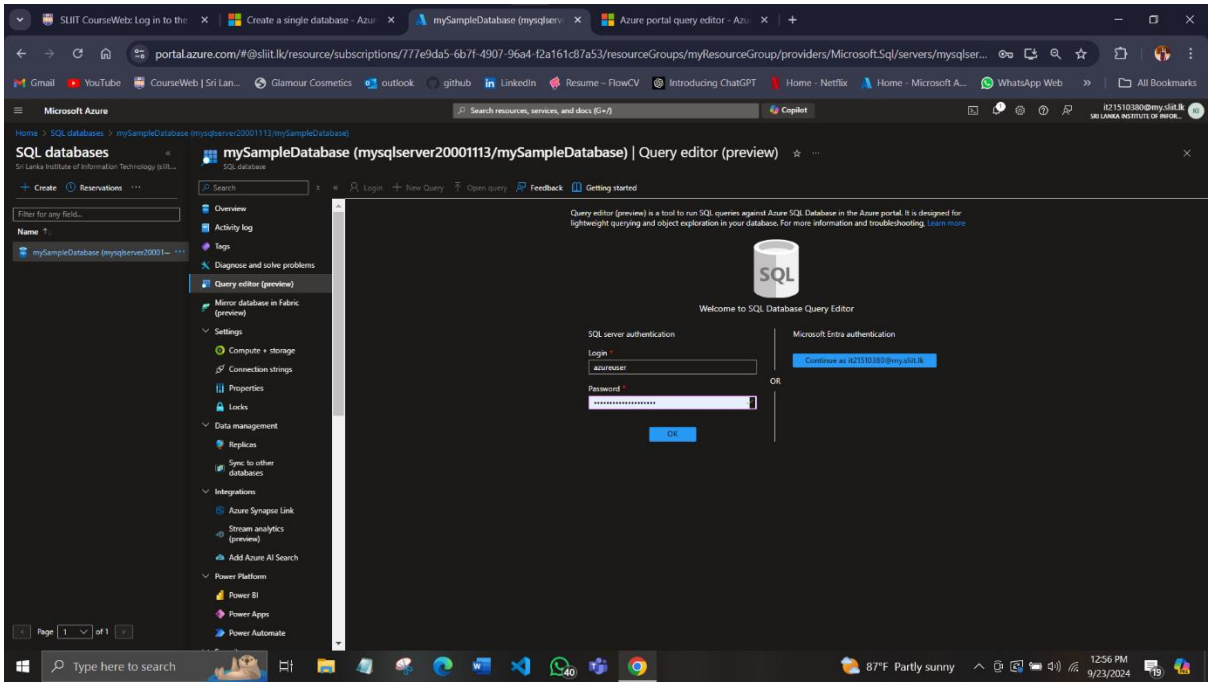
In the portal, search for and select **SQL databases**, and then select your database from the list.



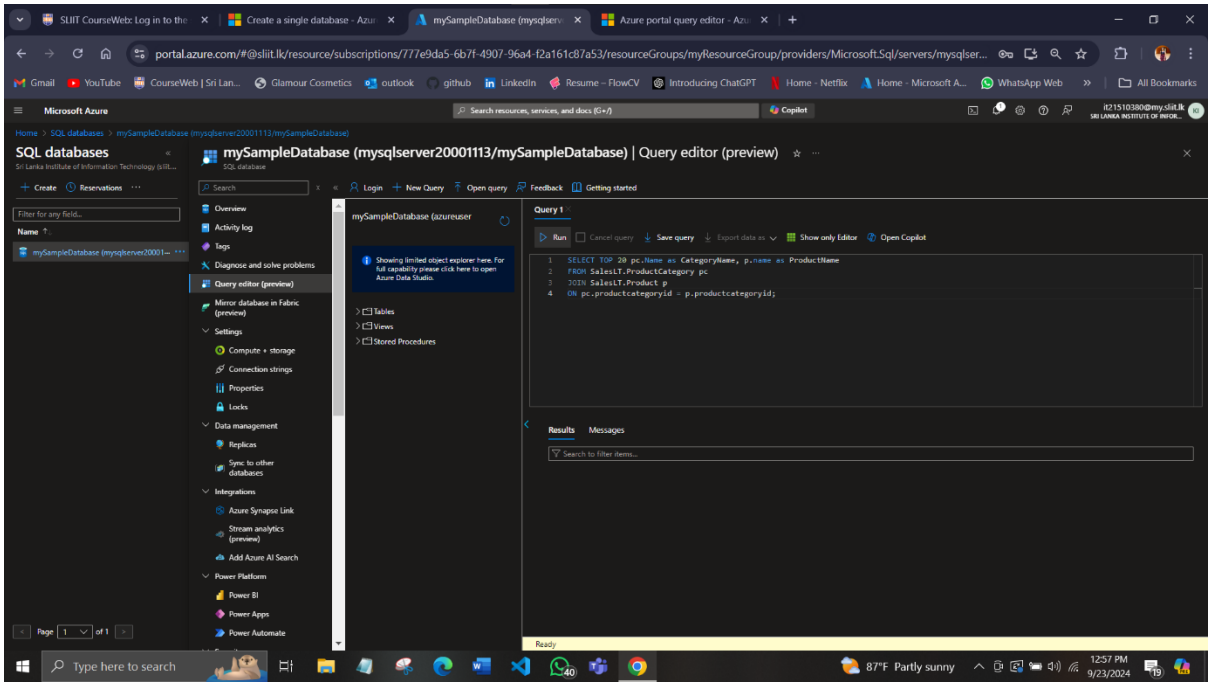

SQL databases
Microsoft Azure
portal.azure.com/#browse/Microsoft.Sql%2Fservers%2Fdatabases
mySampleDatabase (mysqlserver20001113/mySampleDatabase)
Type here to search
87°F Partly sunny
12:52 PM
9/23/2024


mySampleDatabase (mysqlserver20001113/mySampleDatabase)
Start working with your database
Configure access
Connect to application
Start developing
Mirror database in Fabric
Type here to search
87°F Partly sunny
12:55 PM
9/23/2024

2. On the page for your database, select **Query editor (preview)** in the left menu.



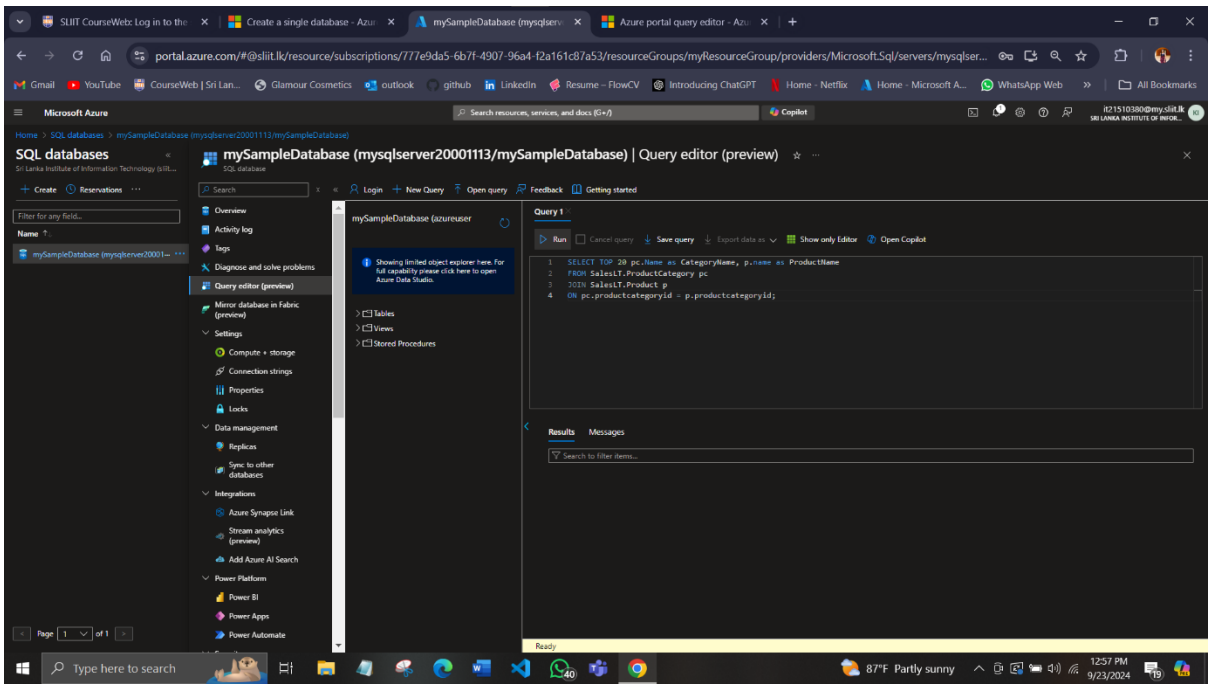
3. Enter your **SQL authentication** server admin login information or use **Microsoft Entra authentication.**

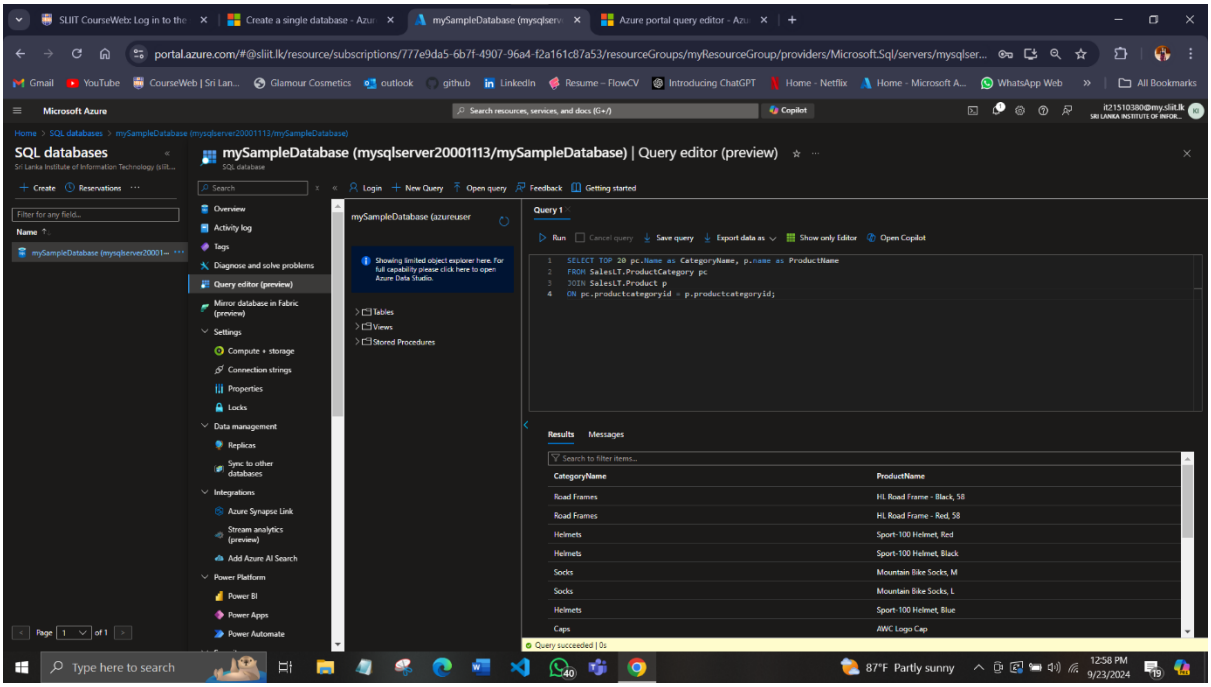


4. Enter the following query in the **Query editor** pane.

```
SELECT TOP 20 pc.Name as CategoryName, p.name as ProductName
FROM SalesLT.ProductCategory pc
JOIN SalesLT.Product p
ON pc.productcategoryid = p.productcategoryid;
```

5. Select **Run**, and then review the query results in the **Results** pane.
6. Close the **Query editor** page, and select **OK** when prompted to discard your unsaved edits.





Clean up resources