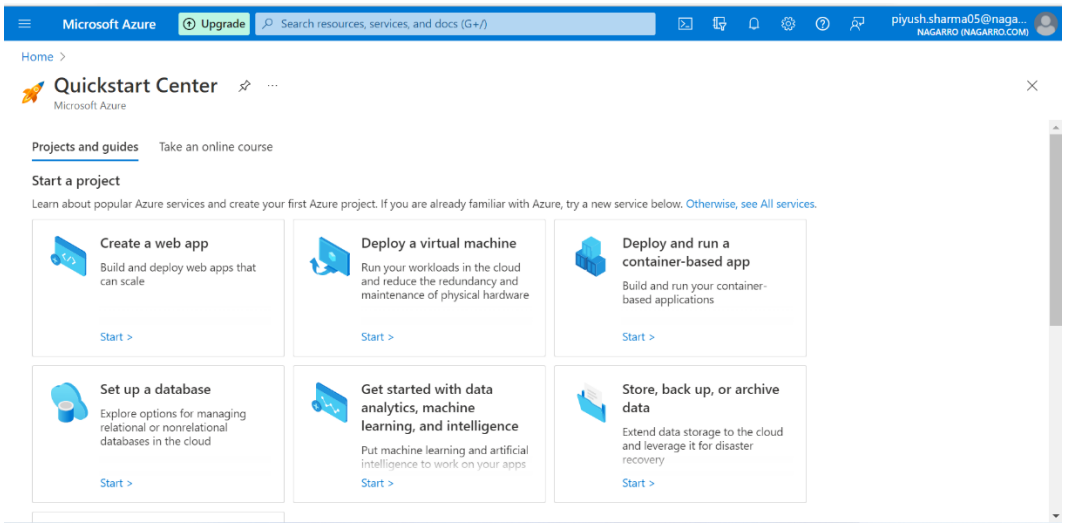
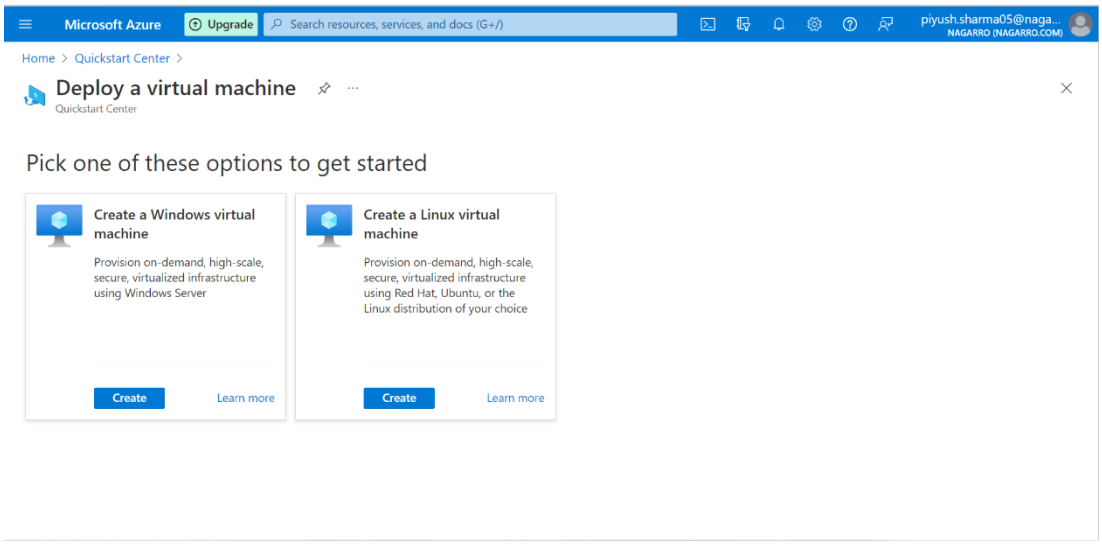
Azure Assignment

Create a virtual network with 2 subnets. Each subnet should have 16 Ips only.

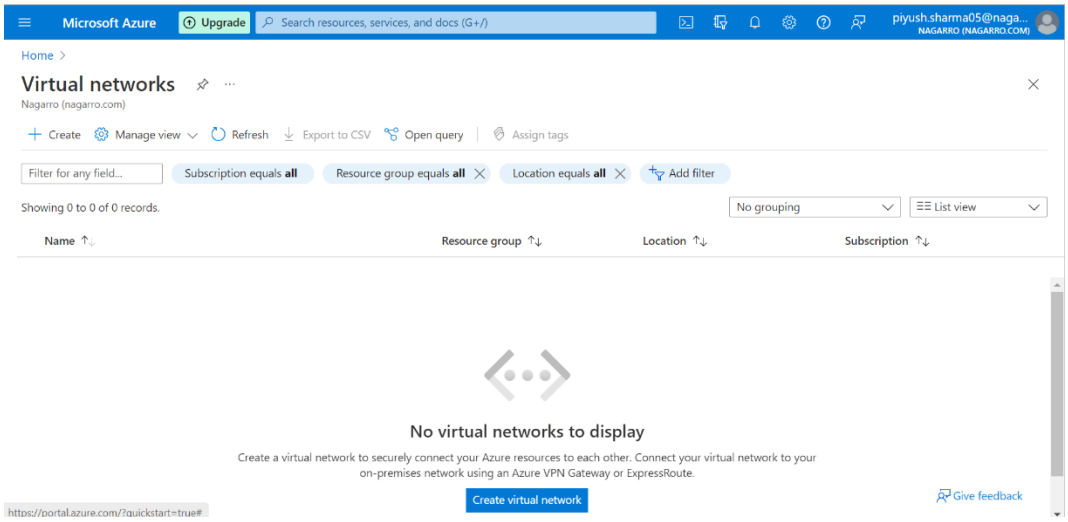
1. From side panel on home page of Azure portal select Quickstart Center and deploy virtual machine.



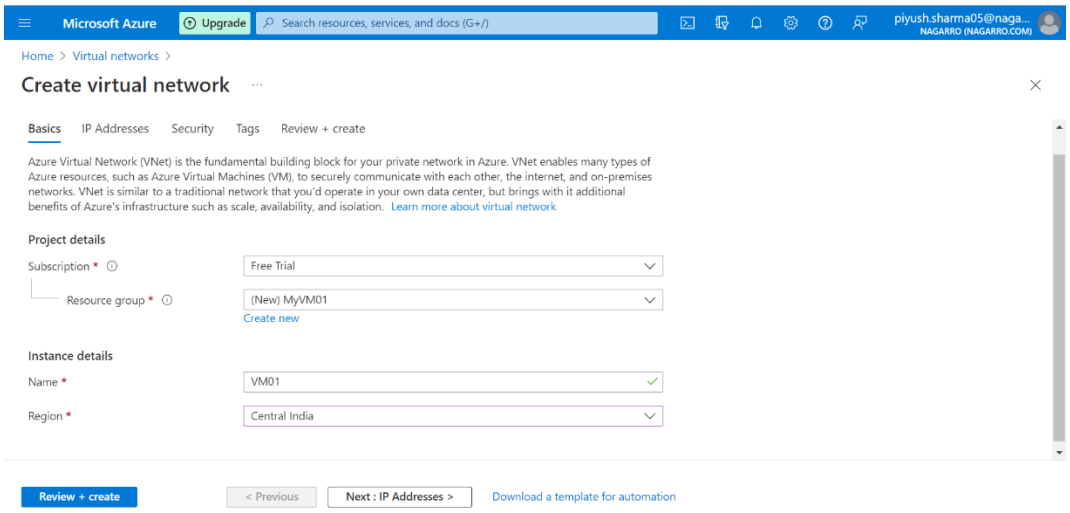
2. Select Create a Windows virtual machine.



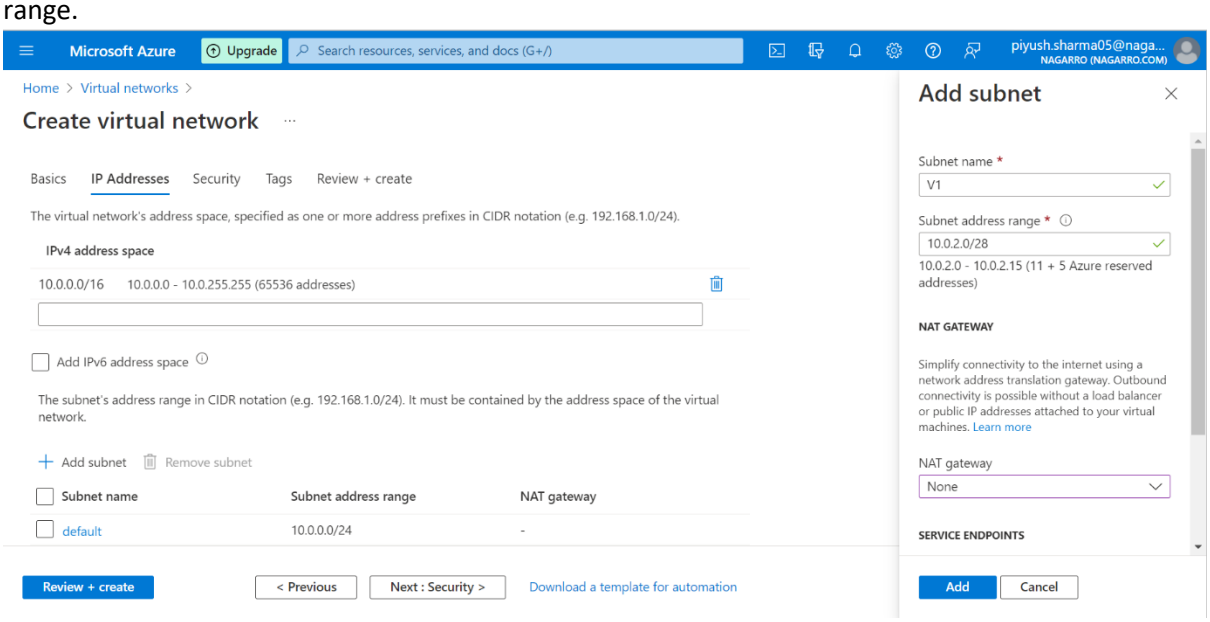
3. Empty list of virtual networks will open up from there select create option to create new virtual network.



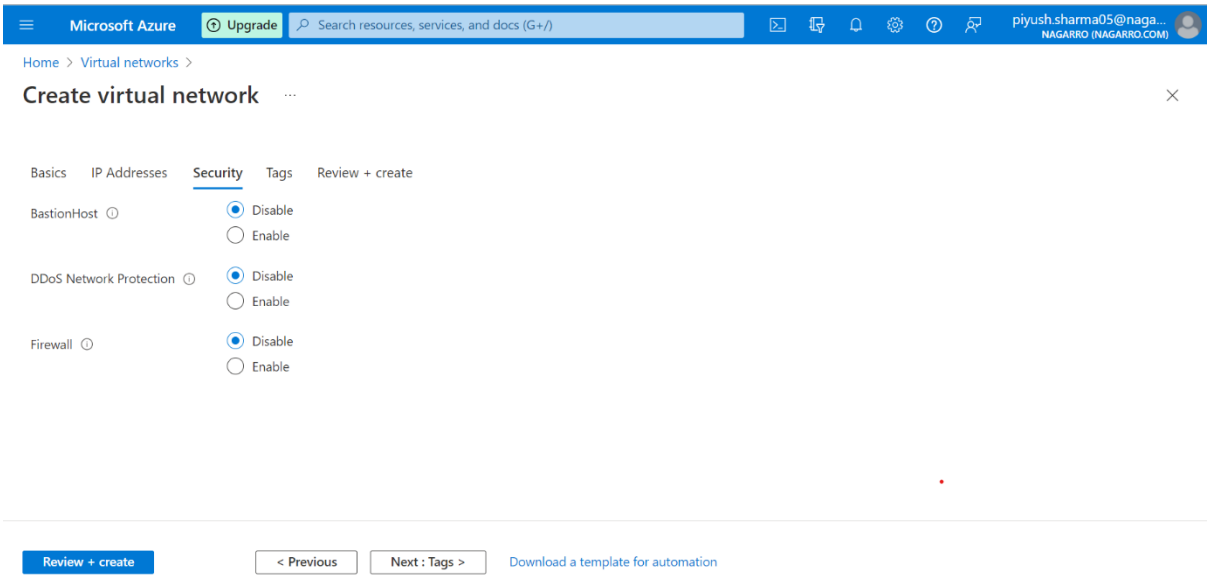
4. Click on create new next to Resource Group. Fill in Instance details. And click next



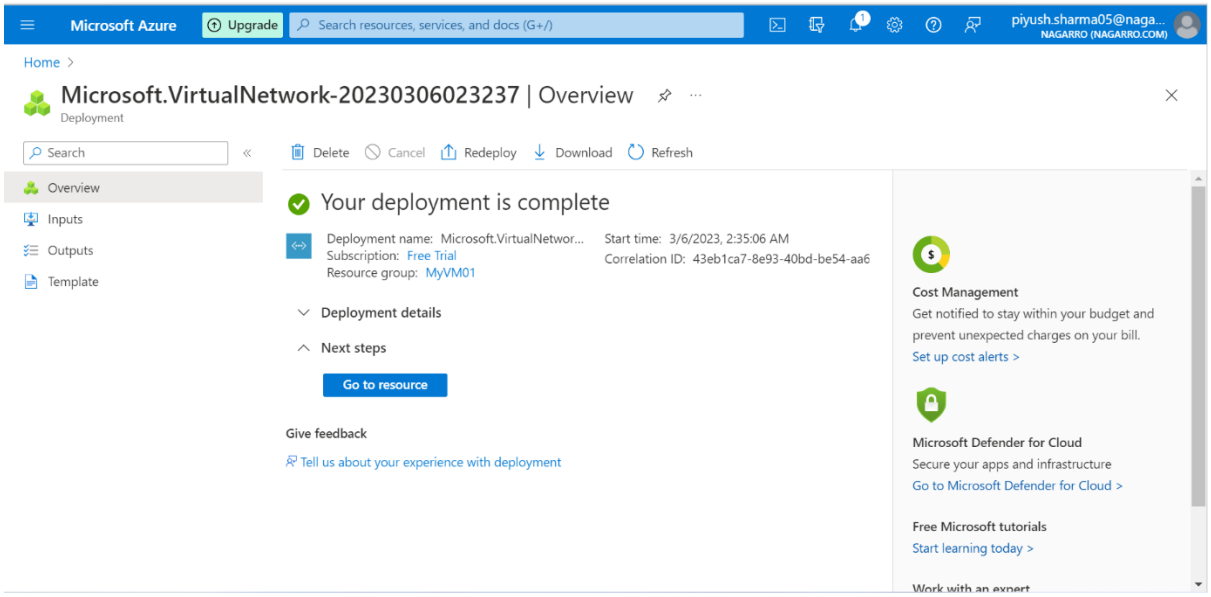
5. Fill in Subnet Address range manually since we need subnets with 16 IPS , we will use /28.
6. After editing default subnet click on add subnet to add another subnet with similar address range.



7. Click on next and verify security details.

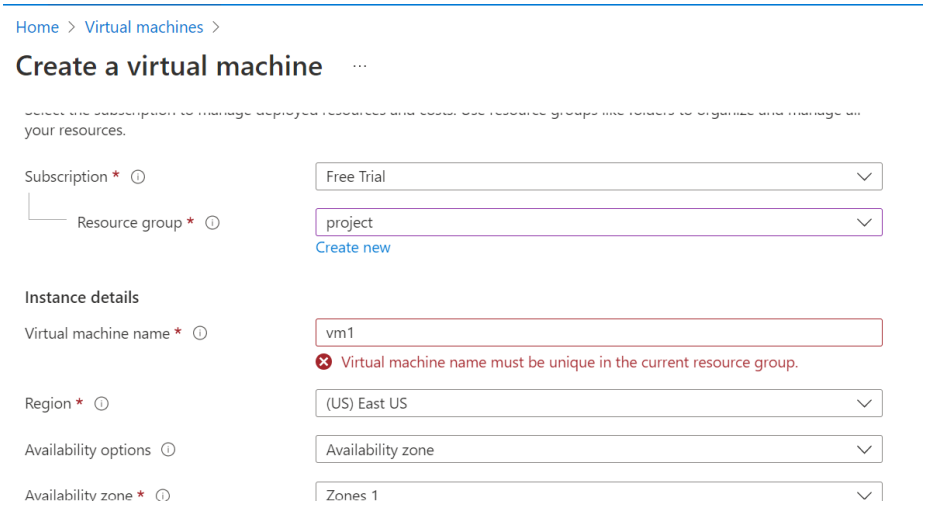


8. Click on Review+Create to review and deploy VM.

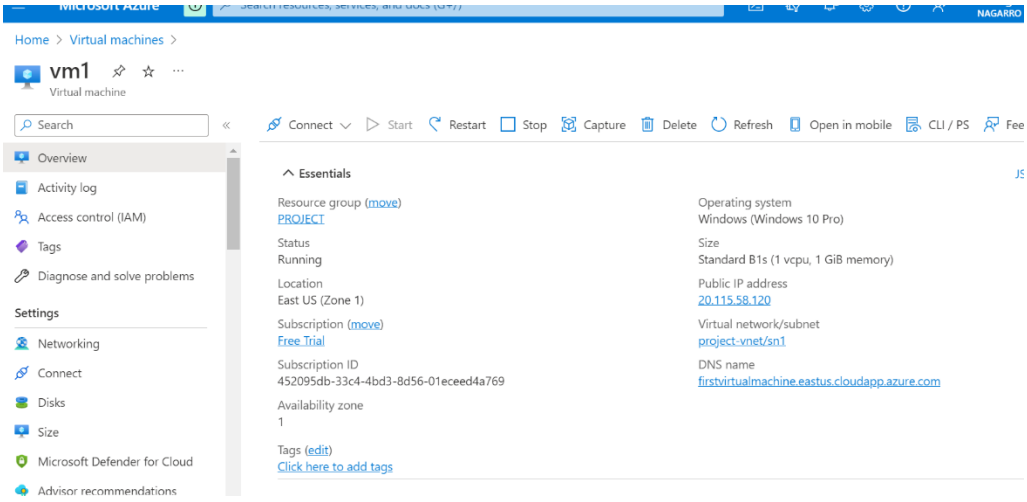


Inside one of the subnets, create a VM and deploy an application code inside it and it should leverage the database on the cloud (any existing application created by you before)

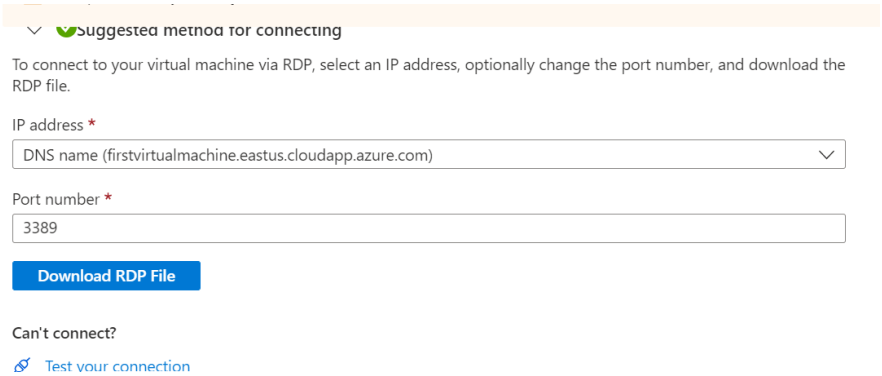
Search virtual machine in the search bar.



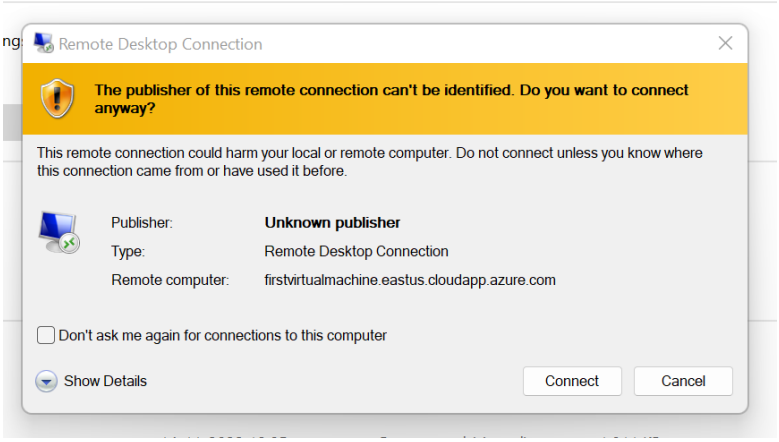
After providing the information then click on the create button and after creating click on the overview.

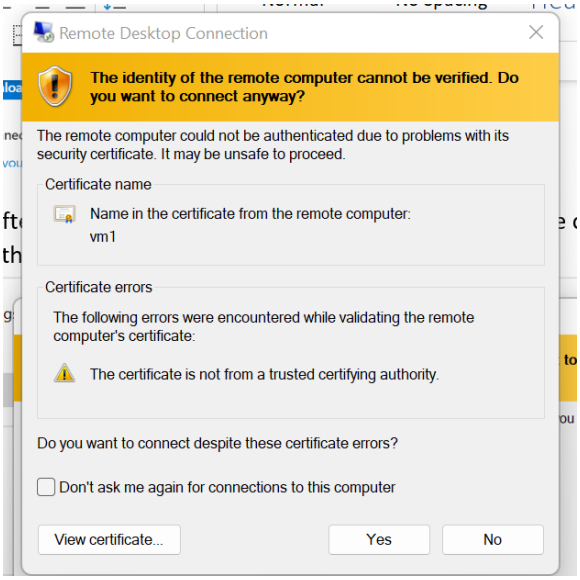


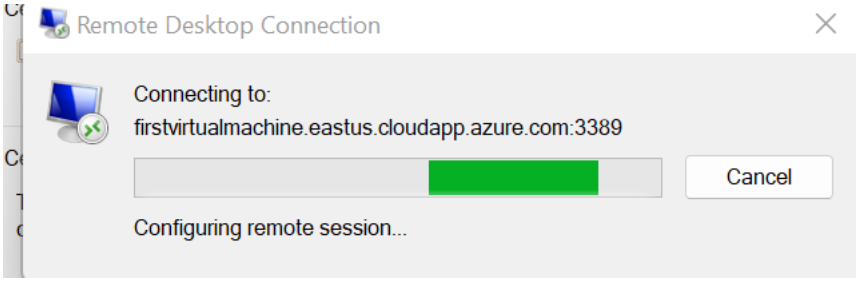
For running the virtual machine on the local computer then download the rdp file after clicking on the connect button.



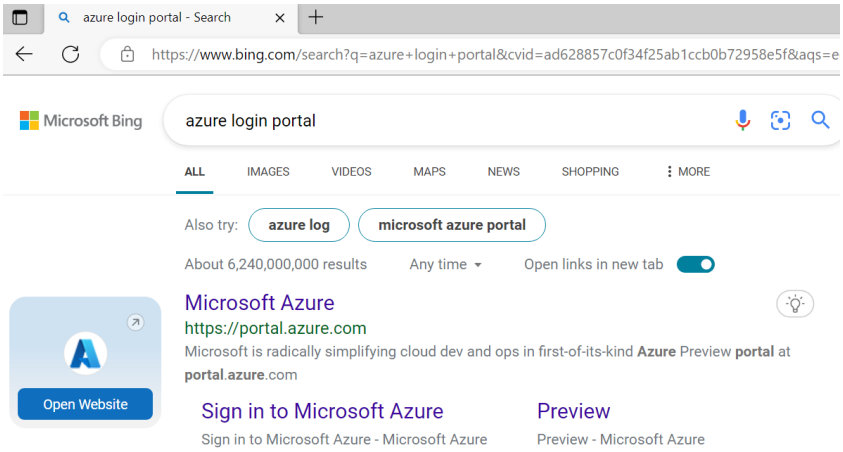
Then after downloading it run the rdp file and then enter the credentials to run the virtual machine.



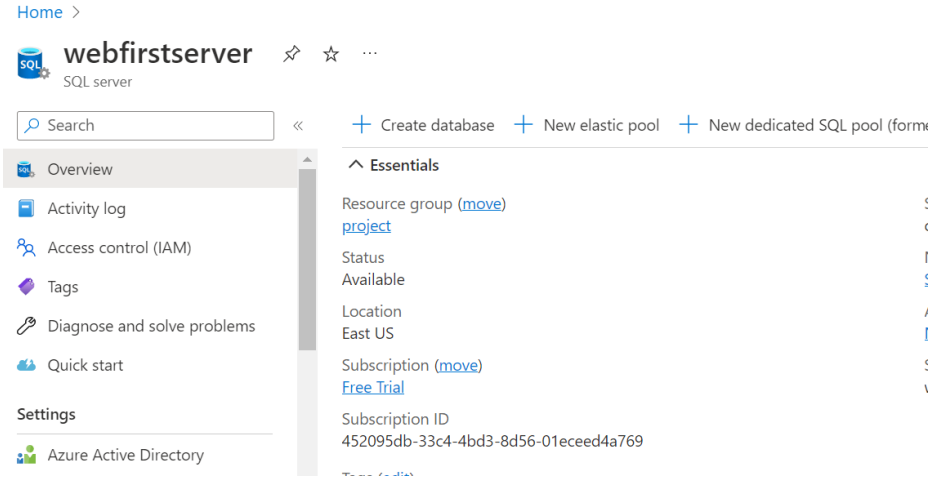




After doing this the virtual machine starts running on your local machine.

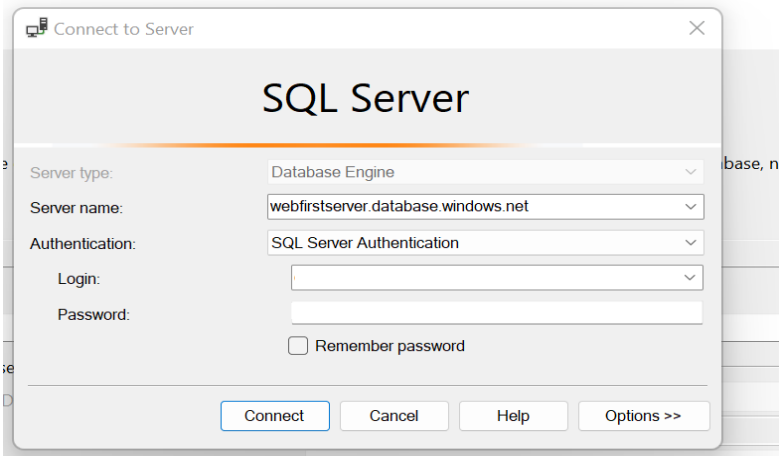


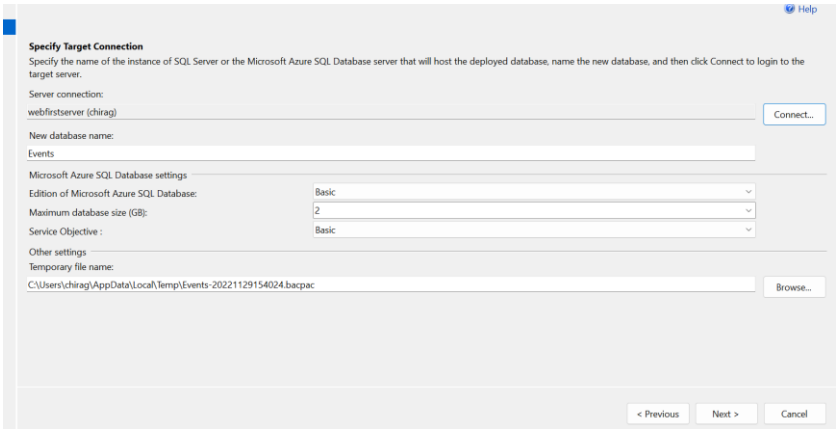
For publishing the database on azure first create the webserver on the azure.



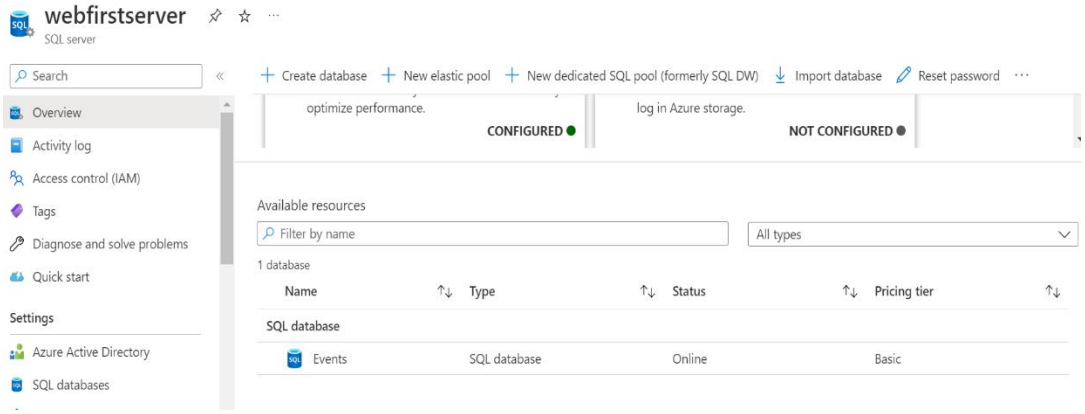
Then open the Microsoft sql server management studio for publishing the database. Then right click on the database name and then click on deploy database to azure.

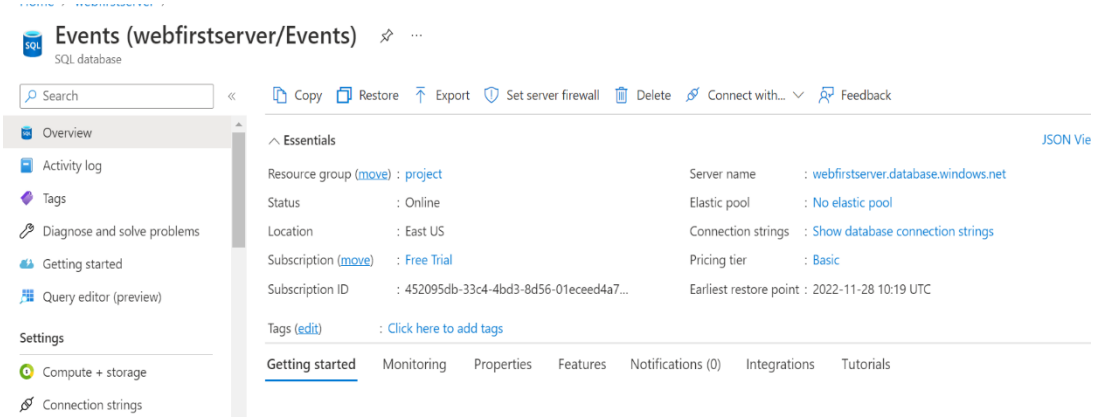
Then click on next and connect to azure web server by providing the credentials.



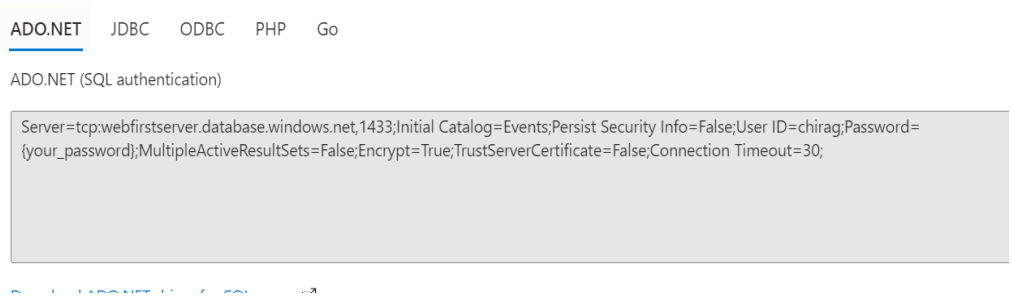


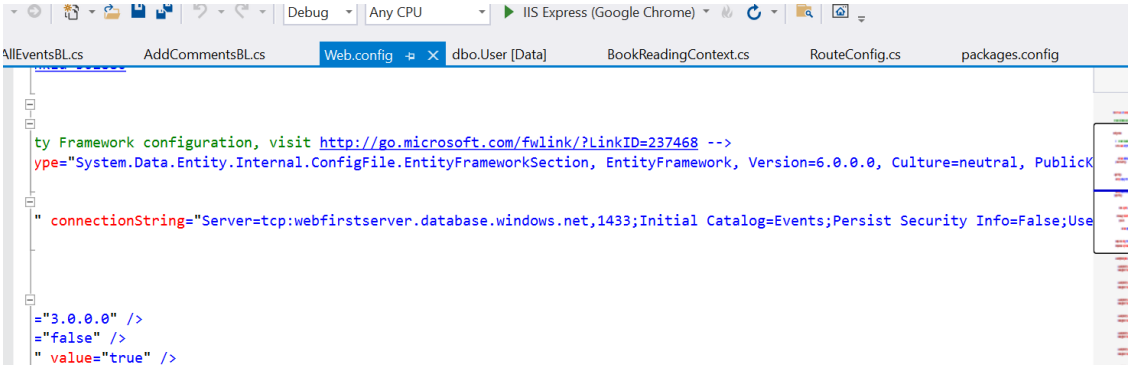
After finishing it open the azure webserver then the database will the there.



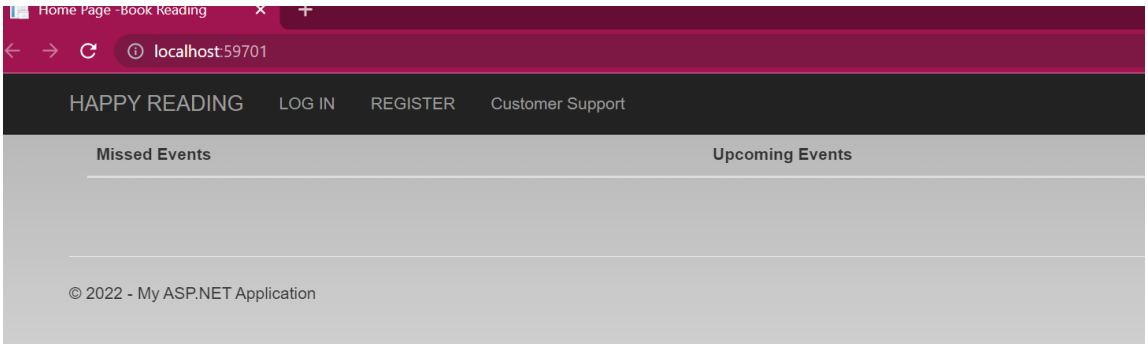


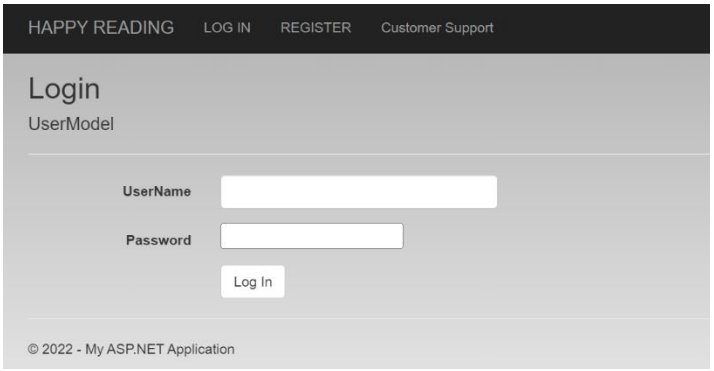
For connecting the application with azure database copy the connection string and then paste it in web.config file of application.

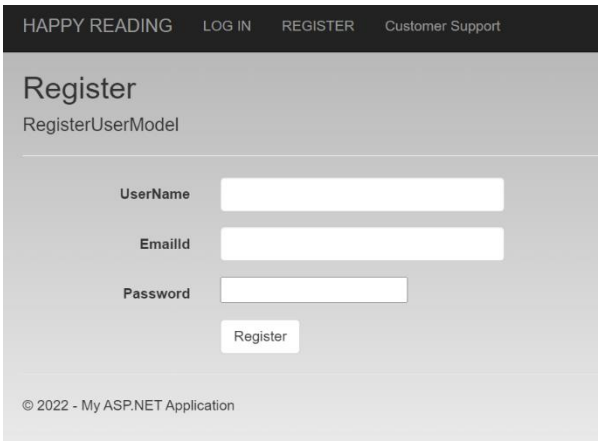


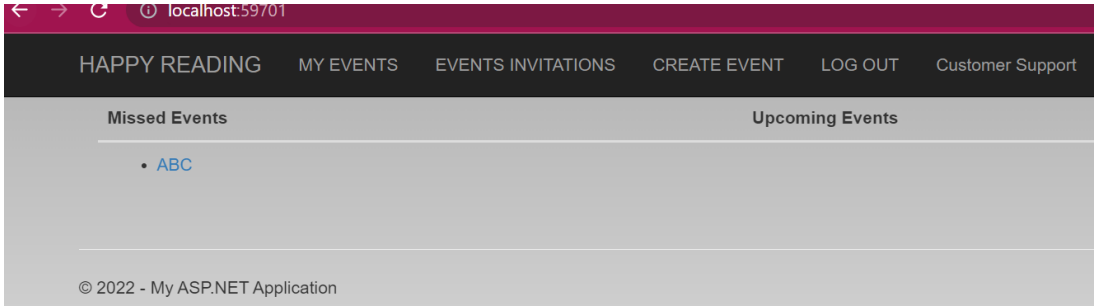


MVC Application



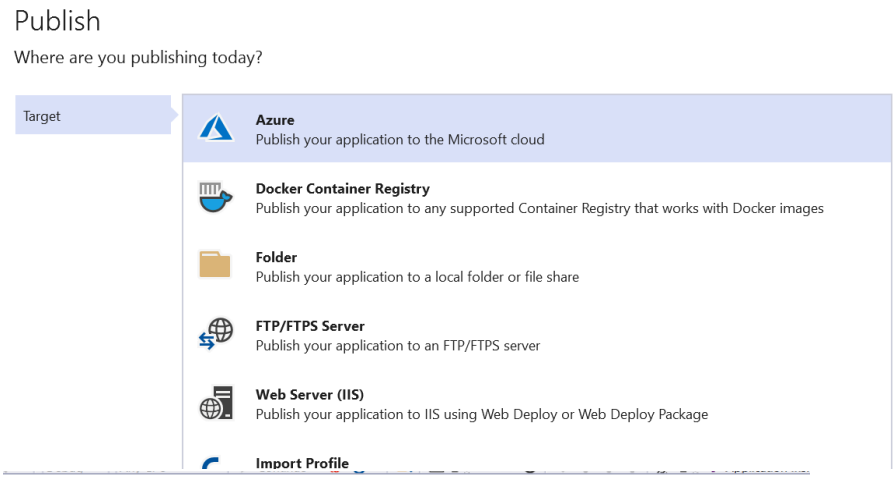


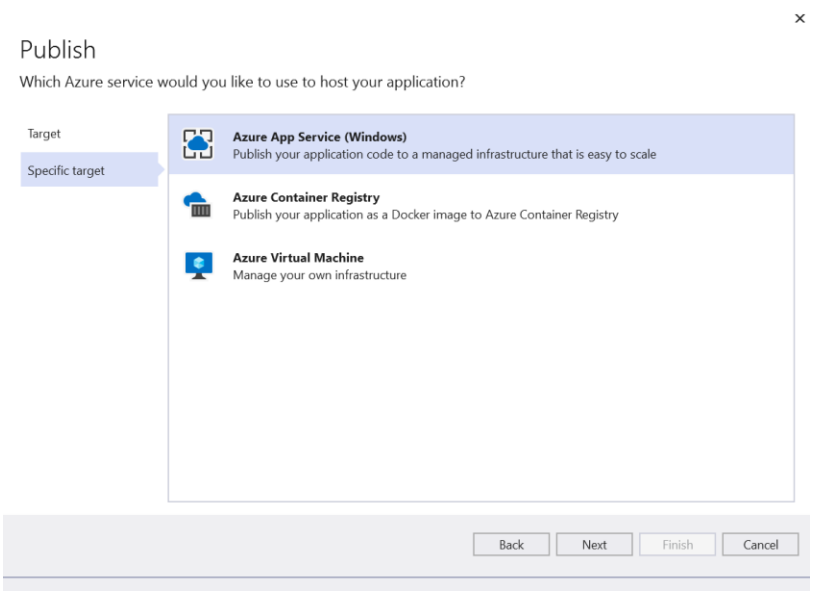




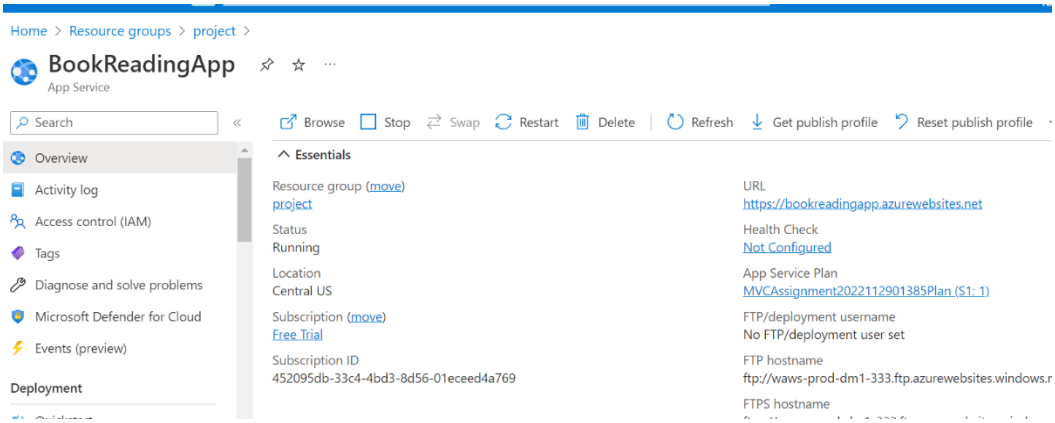
Deploy the same application to Azure App Service. It should also leverage the database on the cloud.

Open the visual studio the right click on the project and then click on the publish button.

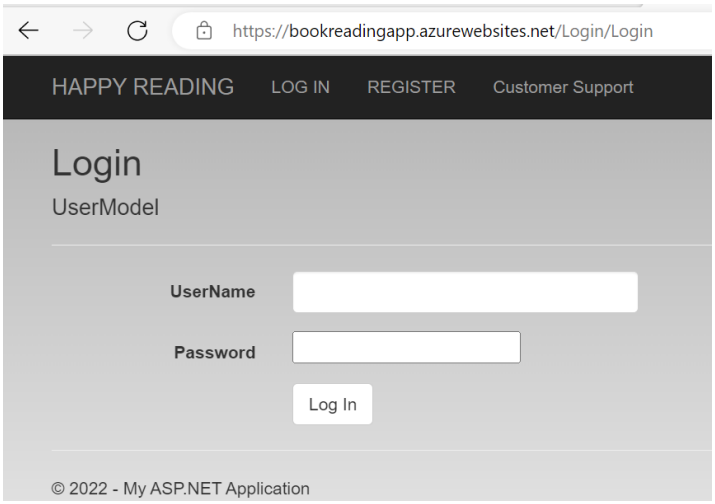


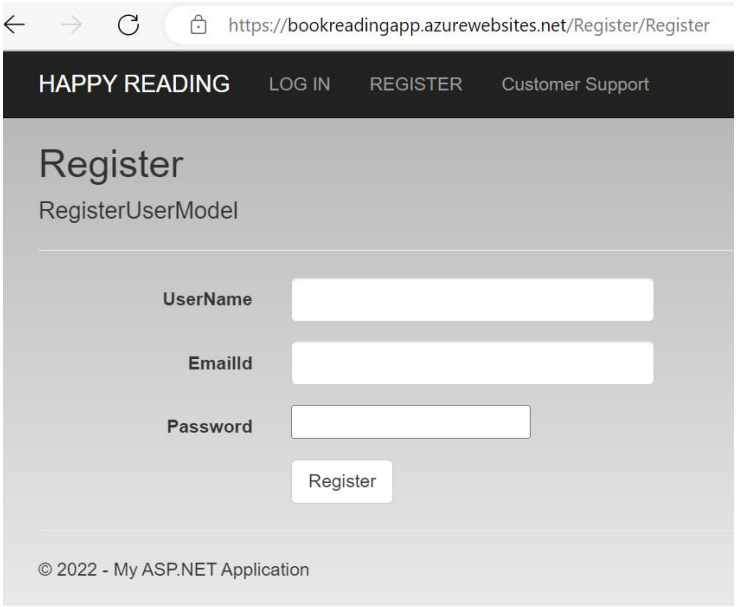


After click on the finish button the application will be deploy using app service on azure cloud.



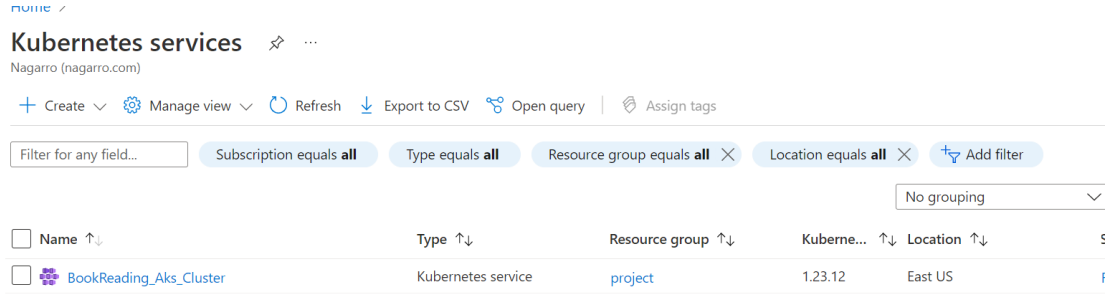
Then click on the url to run the web app.

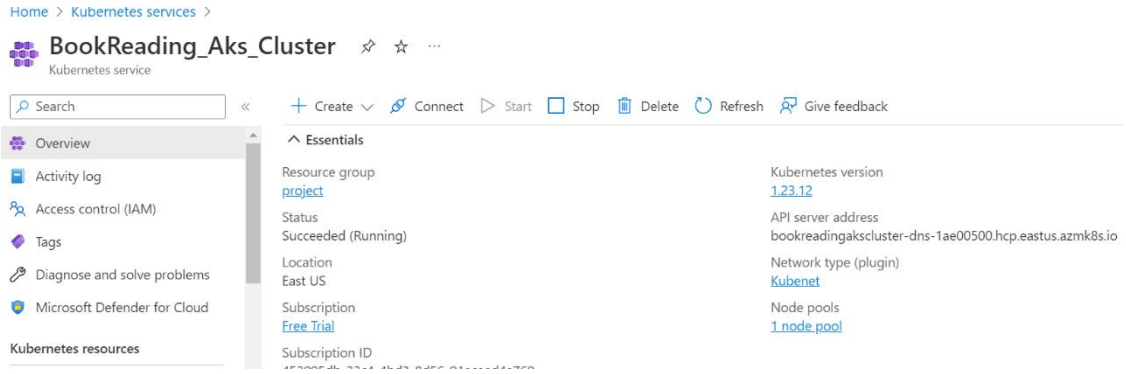




Create the AKS cluster (2 nodes, smallest size VM) and deploy any two services on it. Services should be accessible from the internet.

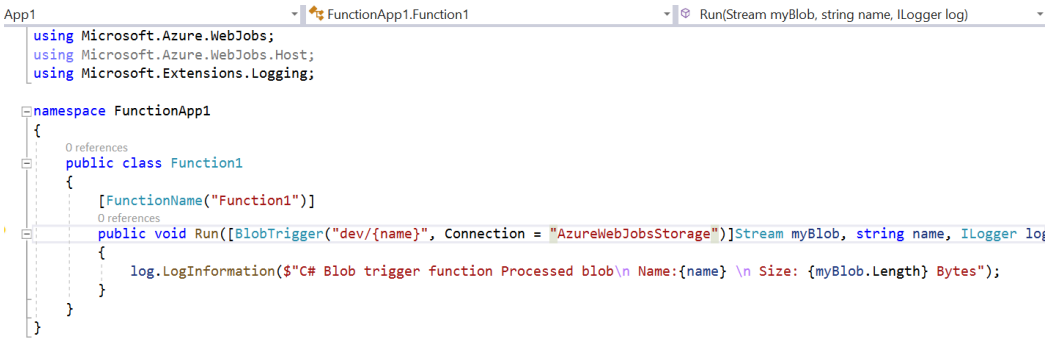
Search Kubernetes services in the search bar.



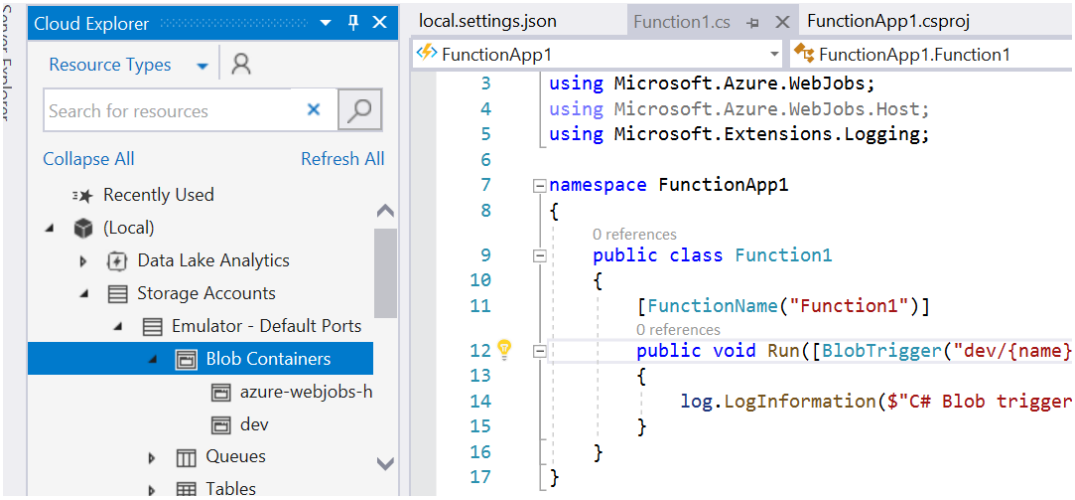


Create an Azure function that should trigger as soon as you upload a file in the blob storage. Function should be able to print the name of the file uploaded in the function.

First create azure function project on the visual studio.



Copy the connection from local.settings.json file and paste it in function argument .
Open the cloud explorer and the create the blob .



Initially we don't have any file in blob container so it will show us this.

```
Functions:

        Function1: blobTrigger

For detailed output, run func with --verbose flag.
[2022-11-29T10:39:20.589Z] Host lock lease acquired by instance ID '00000000000000000000000004FFA1F5E'.
```

Then upload the file in blob container named dev container.Then it will show us this.

```
Functions:

        Function1: blobTrigger

For detailed output, run func with --verbose flag.
[2022-11-29T10:39:20.589Z] Host lock lease acquired by instance ID '00000000000000000000000004FFA1F5E'.
[2022-11-29T10:41:57.080Z] Executing 'Function1' (Reason='New blob detected: dev/azure screenshots.docx', Id=32b800f5-eb
5b-494c-bcb4-2497fde9ed6d)
[2022-11-29T10:41:57.084Z] Trigger Details: MessageId: 767bd5b3-851f-4733-8b3a-2a42801ca241, DequeueCount: 1, InsertionT
ime: 2022-11-29T10:41:56.000+00:00, BlobCreated: 2022-11-29T10:41:54.000+00:00, BlobLastModified: 2022-11-29T10:41:54.00
0+00:00
[2022-11-29T10:41:57.088Z] C# Blob trigger function Processed blob
 Name:azure screenshots.docx
 Size: 394715 Bytes
[2022-11-29T10:41:57.101Z] Executed 'Function1' (Succeeded, Id=32b800f5-eb5b-494c-bcb4-2497fde9ed6d, Duration=92ms)
```