DXC AZURE ANALYTICS

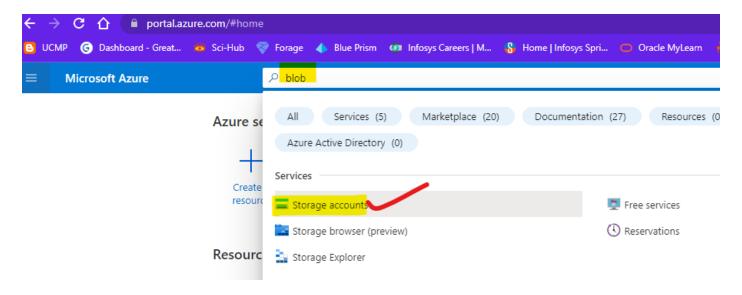
Assignment-8

Name: Atharva Singh Jadhav ID: DXCAB12035

Date of submission: 08-06-2022 Batch: DXC-AZURE-ANALYTICS

1. Explain the steps with screenshots how to create Blob storage in Azure cloud?

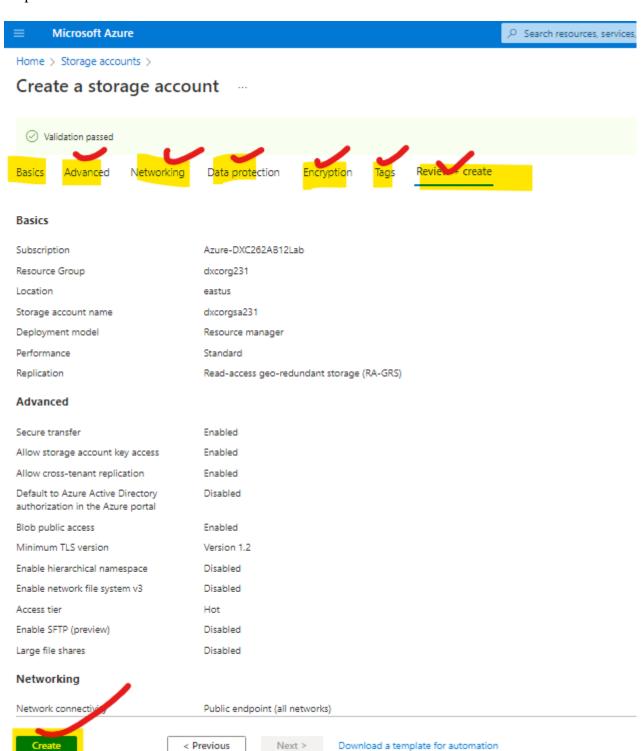
Ans) to create blob storage (Also known as Storage account) in azure cloud we have to follow the following steps

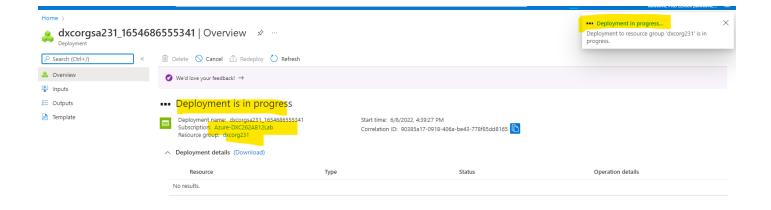


Create a storage account

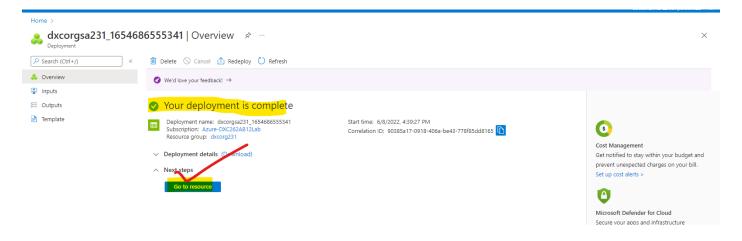
Basics	Advanced	Networking	Data protection	Encryption	Tags	Review + create	
	The cost of your accounts	storage account d	 epends on the usage	and the options	you choos	e below. Learn more about	Azure
Projec	t details						
			the new storage account the other resources.	unt. Choose a ne	w or existin	ng resource group to organ	ize and
Subscri	ption *		Azure-DXC262AB1	12Lab			~
	Resource group	*	dxcorg231 Create new				~
Instan	ce details						
lf you n	If you need to create a legacy storage account type, please click here.						
Storage	account name	① *	dxcorgsa231				
Region	(i) *		(US) East US				~
Perform	nance (i) *					rios (general-purpose v2 ac	count)
Redund	lancy (i) *		Geo-redundant sto		cenarios tn	at require low latency.	~
	, -		✓ Make read acce	ess to data availa	ble in the	event of regional unavailabi	ility.
Revie	w + create		< Previous	Next : Adv	anced >		

Step-3:





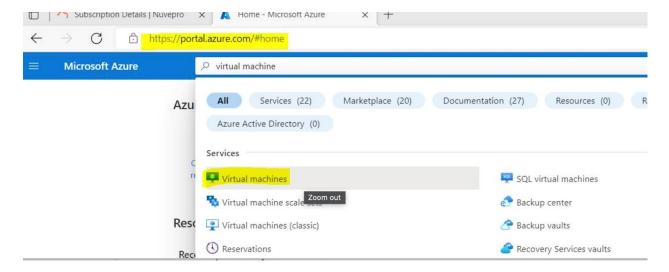
Step-5: The storage Account is created successfully.



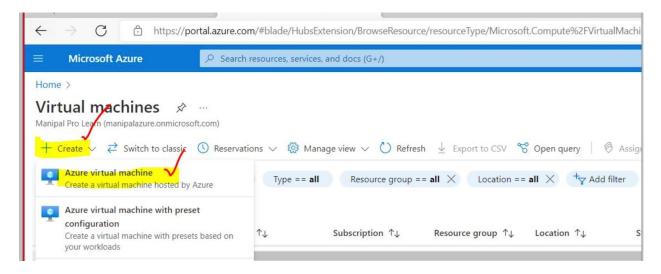
- 2. Explain the steps with screenshots how to create Virtual machine & how to connect from
- (i) Local Computer CMD method?
- (ii) Using Azure cloud Shell?
- (iii) Also using Azure Bastion?

Ans) we can create virtual machines in azure by following the three method

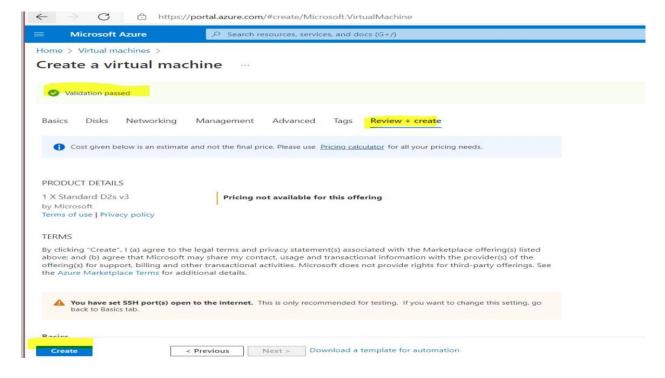
Ans: Step 1: Login to Azure and click on "Virtual Machine".



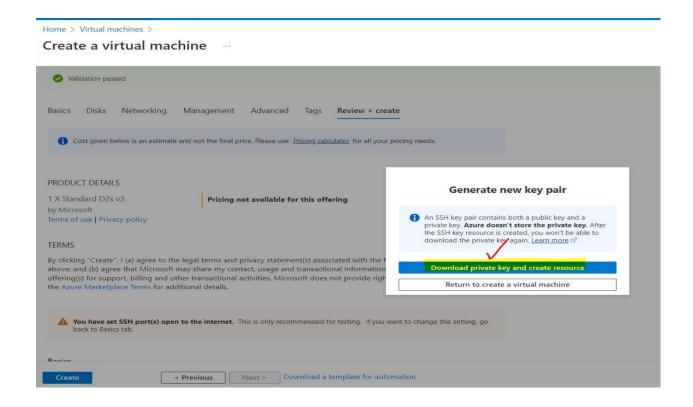
Step 2: Click on "create" and then click on "Azure Virtual Machine" to create a Virtual Machine.



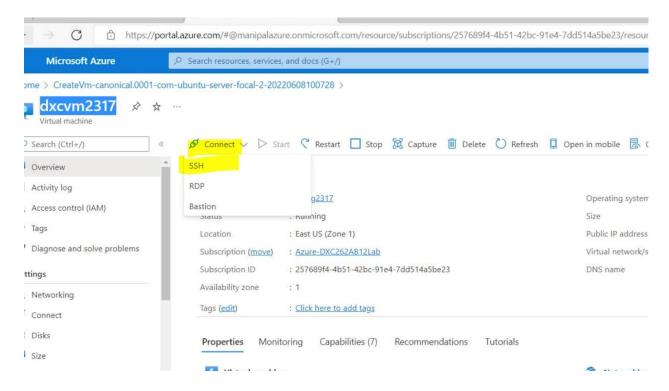
Step 3: Complete all the required fields and click on "create" after reviewing to deploy a virtual machine.



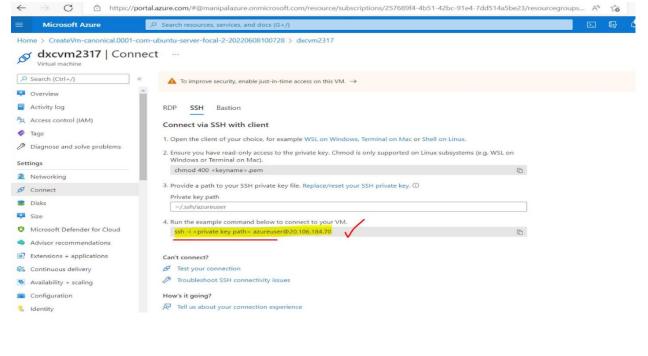
Step 4: Generate new key pairs.



Step 5: Connect to a virtual machine using either of the three methods. (i) **Local Computer - CMD method:** connect using ssh.



To connect with VM run the key path in the command prompt.

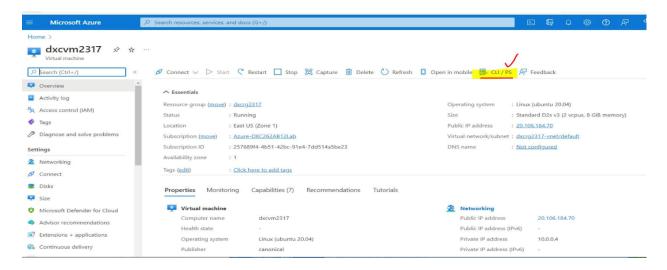


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(c) Microsoft Corporation. All rights reserved.

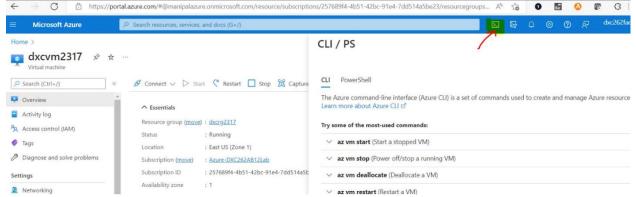
::\windows\system32>cd c:\Users\KITS\Documents\
::\windows\system32>cd c:\Users\KITS\Documents\
::\windows\system32>cd c:\Users\KITS\Documents\
::\users\KITS\Documents>ssh -i C:\Users\KITS\Documents\dxcvm2317_key.pem azureuser@20.106.184.70

The authenticity of host '20.106.184.70 (20.106.184.70) can't be exteblished.
scnsak key fingerprint is SHA256:\text{The figurity and rize} zeropadus-KNispakayYvdsredk.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
very sure you want to continue connecting (yes/no/[fingerprint])? yes
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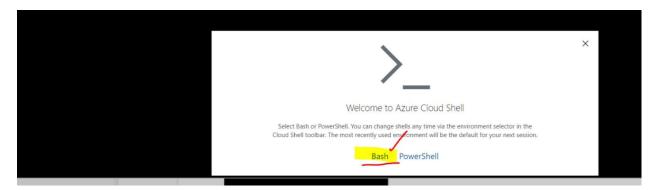
(ii) Using Azure cloud Shell: Click on CLI/PS to connect to VM using cloud shell.



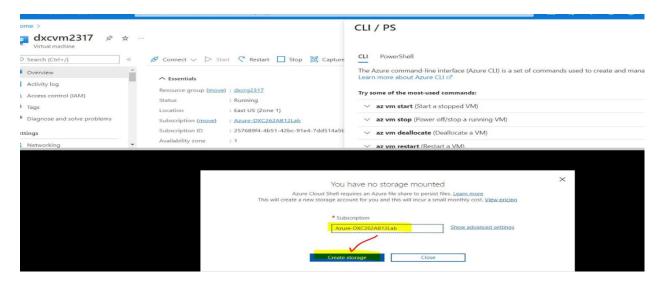
Click on the icon beside the search bar to open Azure Cloud Shell.



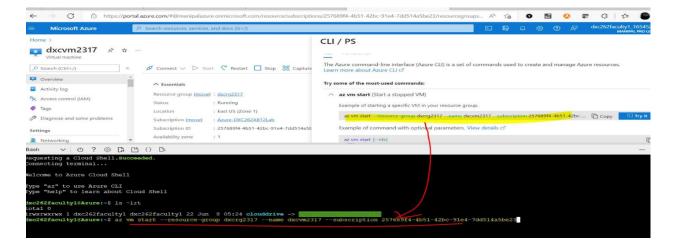
Now click on "bash" to connect to your virtual Machine.



Now create storage as shown in the below screenshot.

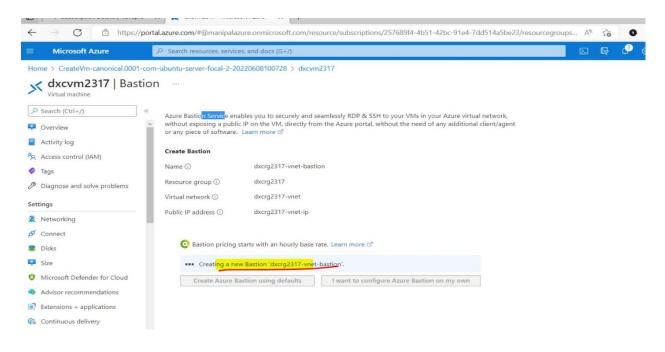


Now to start the vm use the az vm start command as shown.



(iii) Also using Azure Bastion:

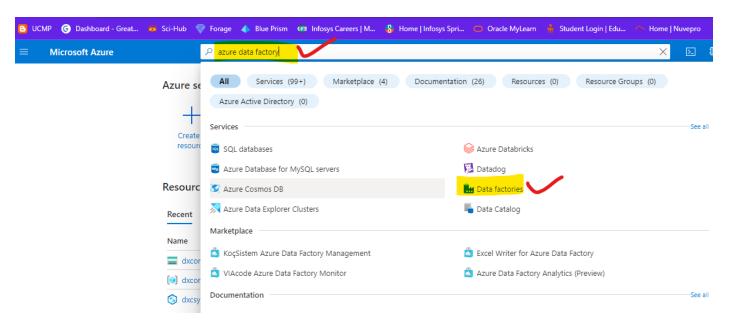
Click on connect and select "bastion" to create a virtual machine using Azure Bastion.



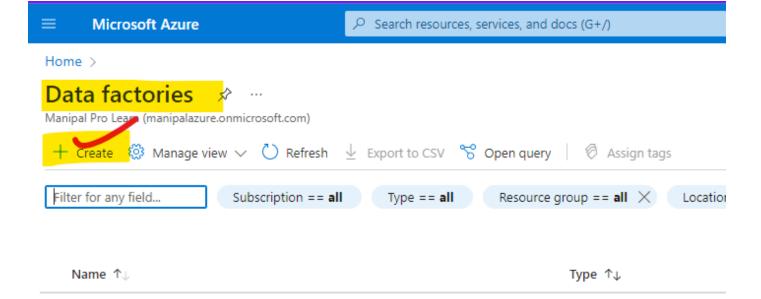
3. Explain the steps with screenshots how to create Data factory?

Ans) These are the following steps to create Data factory

Step-1: search for data factory in search bar

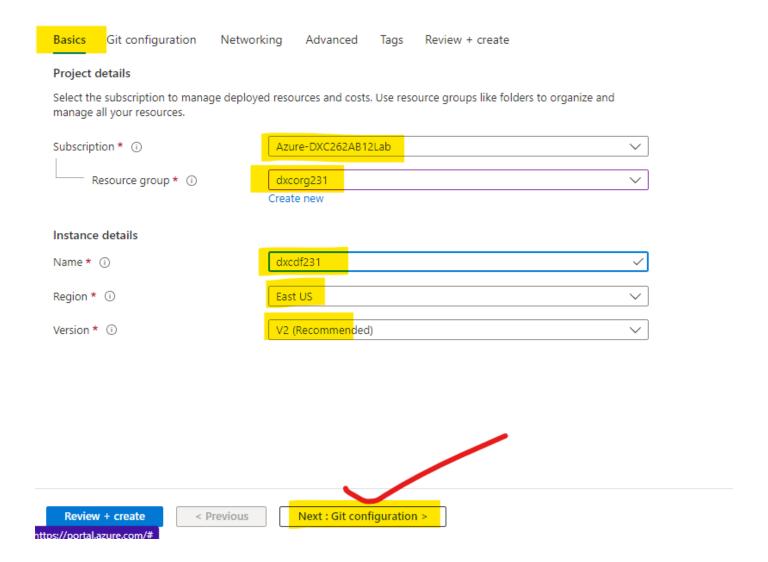


Step-2: click on create button



Step-3:

Create Data Factory ...



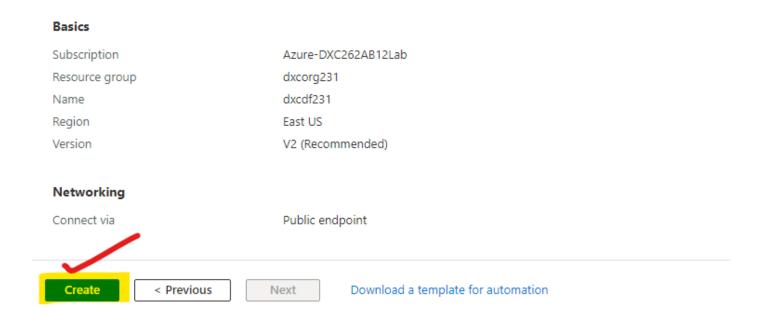
Step-5: set all configurations and there is no need to update at last review and create

Create Data Factory

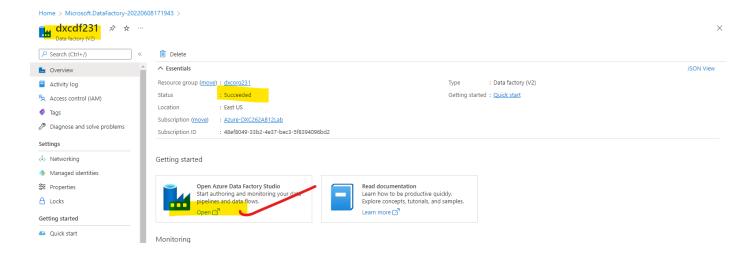


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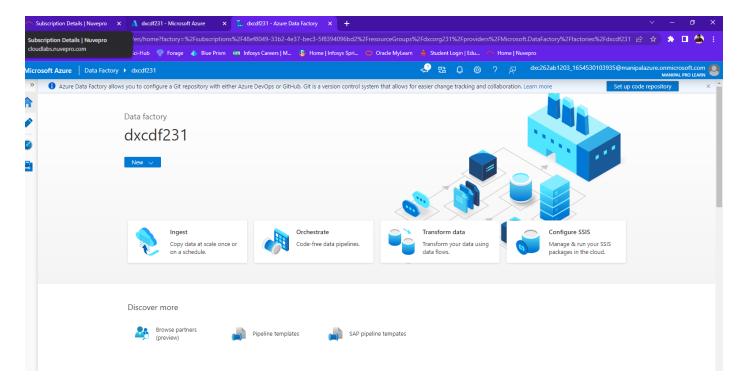
By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; and (b) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the Azure Marketplace Terms for additional details.



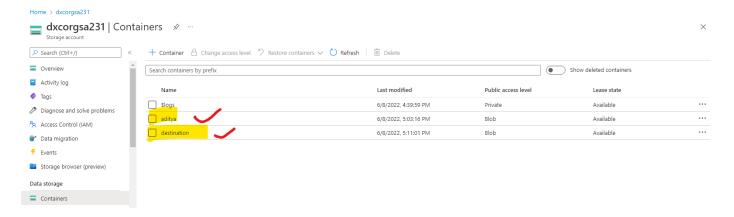
Step-6: wait it for deployment. and once its is done



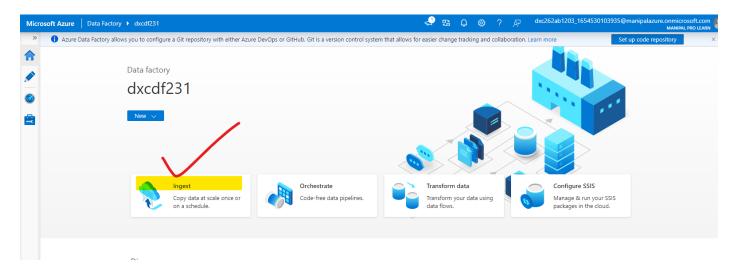
Step-7: after clicking on the open button the data factory window will open in new window



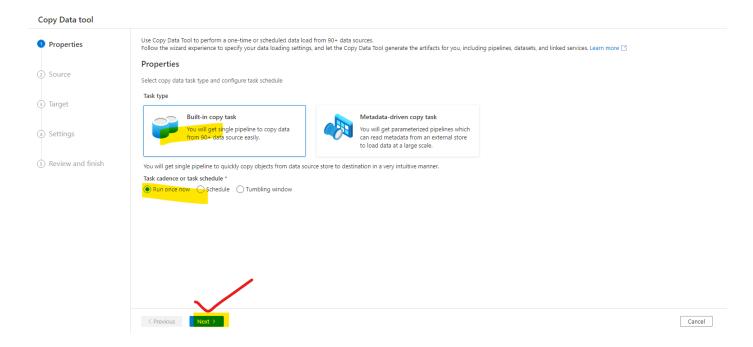
- 4. Explain the steps with screenshots how to copy data from source blob to destination blob?
- Ans) After creating the source blob(in my case blob name -"aditya") and destination blob is destination



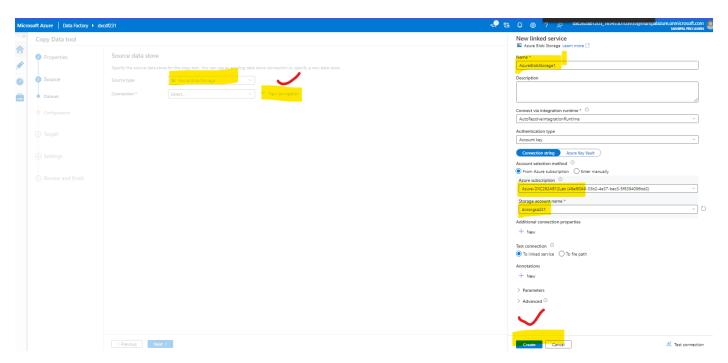
Step-2:after That open data factory click on ingest



Step-3: after clicking on ingest follow these steps



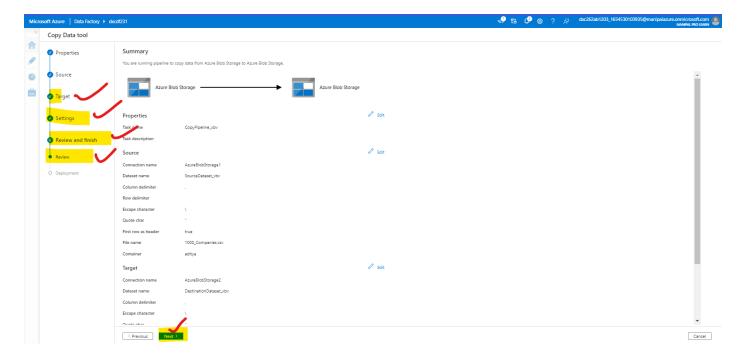
Step-4: give the data stores account location and required details for source data



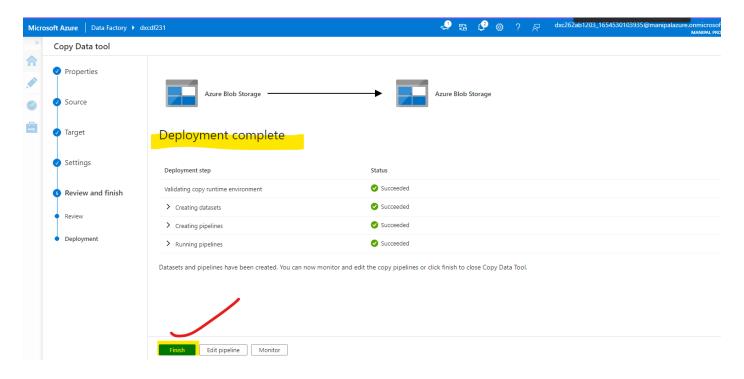
Step-5: give the data stores account location and required details for destination data

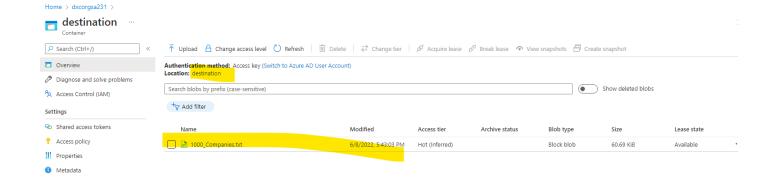
Copy Data tool	
Properties	Destination data store Specify the destination data store for the copy task. You can use an existing data store connection or specify a new data store.
Source	Target type Azure Blob Storage
3 Target	Connection * Li Azure8lobStorage2
Dataset	If the identity you use to access the data store only has permission to subdirectory instead of the entire account, specify the path to browse.
O Configuration	destination Enough
Settings	Copy behavior ①
© Review and finish	None V Max concurrent connections ①
	Block size (MB) ①

Step-6: after reviewing all the data



Step-6: the pipe lines are created and data is ready to transfer



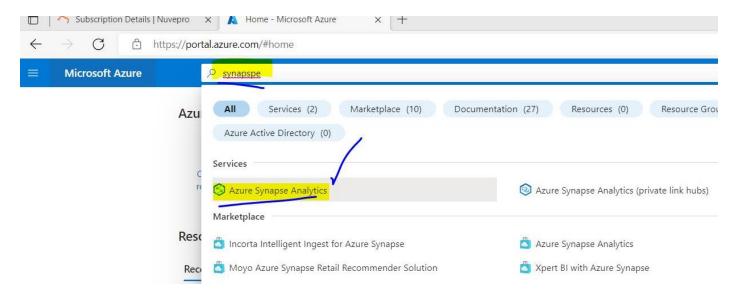


5. Explain the steps with screenshots how to create Virtual Network in Azure?

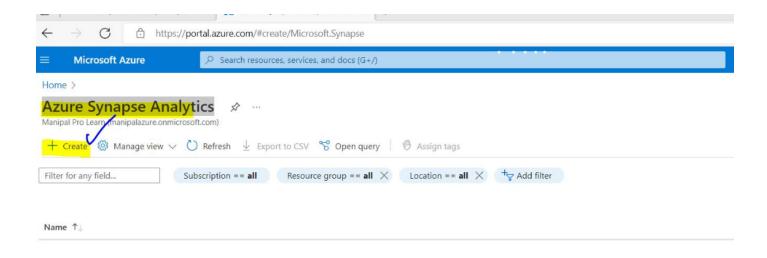
Ans)

6. Explain the steps with screenshots how to create azure synapse analytics?

Ans)



Stpe-2:

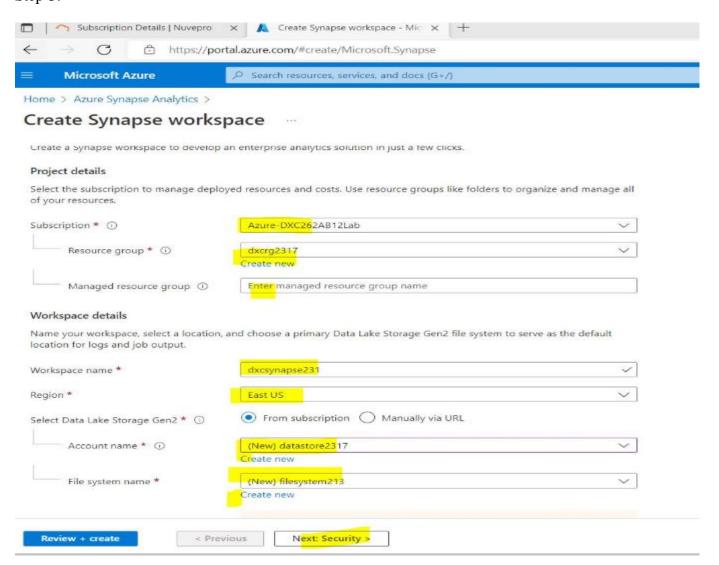




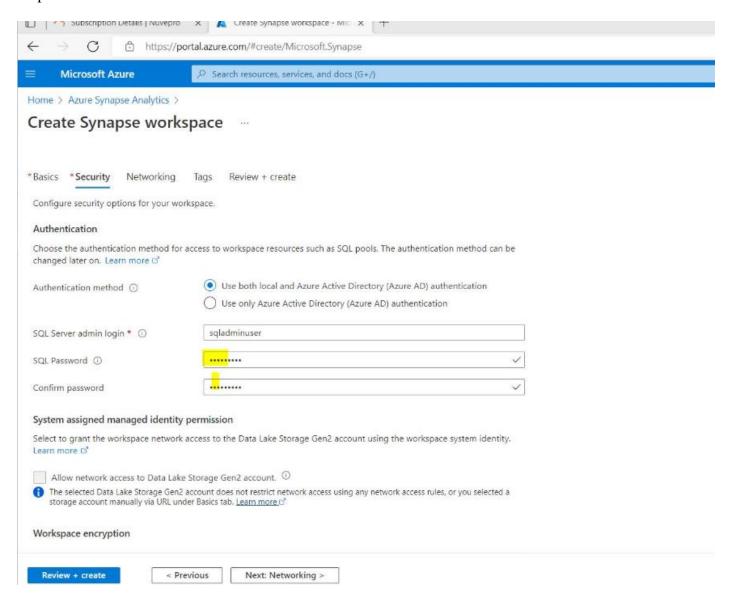
No Azure Synapse Analytics to display

Synapse Analytics is a fully-managed service to build modern data warehouses for enterprises. Synapse Analyt

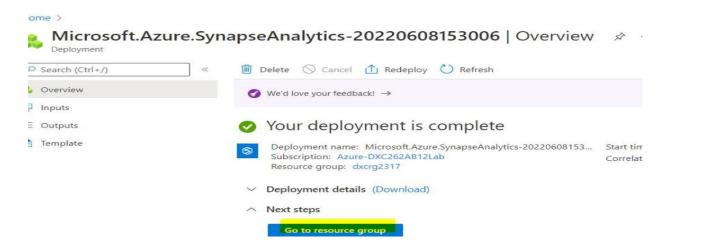
Step-3:



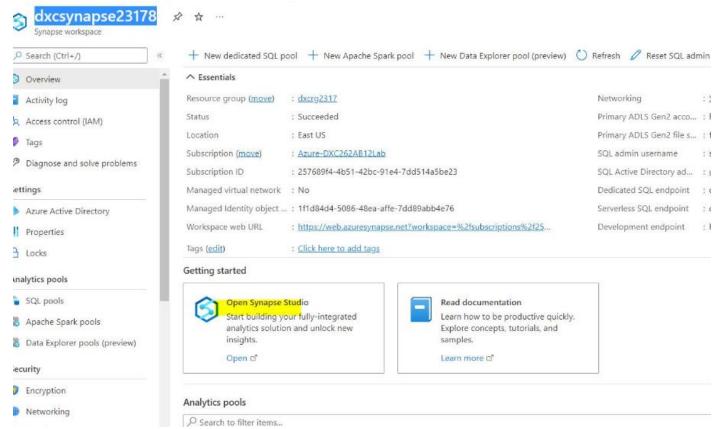
Step-4:



Step-5:

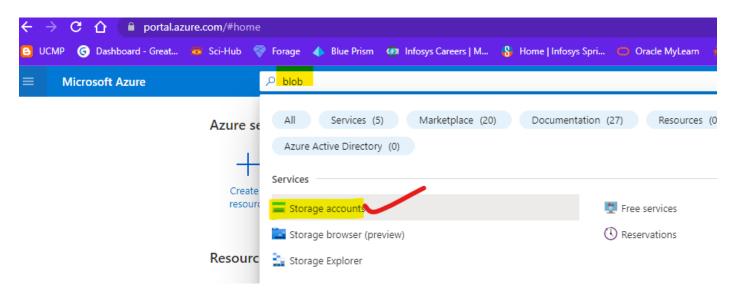


Step-6: the synapse creation is done



7. Explain the steps with screenshots how to create Azure storage account?

Ans)



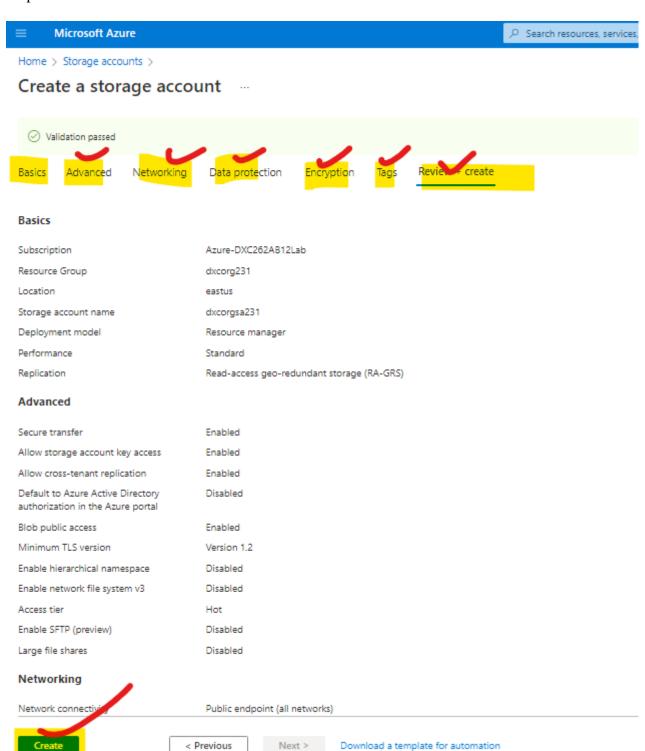
Step-2:

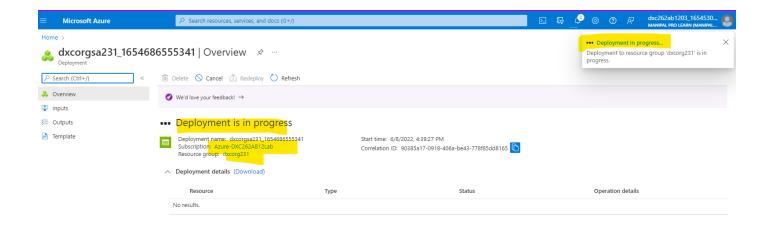
Home > Storage accounts >

Create a storage account

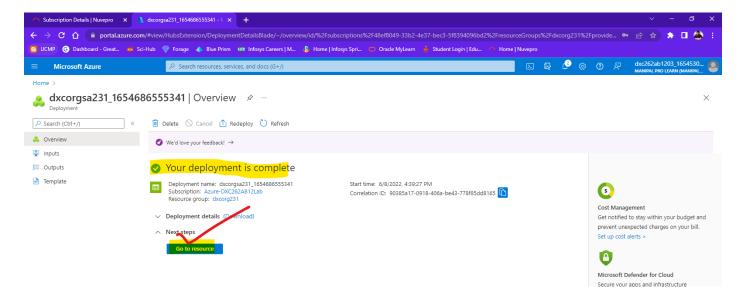
Tables. The cost of your storage account depends on the usage and the options you choose below. Learn more about Azure storage accounts Project details Select the subscription in which to create the new storage account. Choose a new or existing resource group to organize and manage your storage account together with other resources. Subscription * Azure-DXC262AB12Lab W Instance details If you need to create a legacy storage account type, please click here. Storage account name ① * (US) East US Performance ① * © Standard: Recommended for most scenarios (general-purpose v2 account) Premium: Recommended for scenarios that require low latency. Redundancy ② * Geo-redundant storage (GRS) Make read access to data available in the event of regional unavailability.	Basics	Advanced	Networking	Data protection	Encryption	Tags	Review + create	
Select the subscription in which to create the new storage account. Choose a new or existing resource group to organize and manage your storage account together with other resources. Subscription * Resource group * Azure-DXC262AB12Lab V Instance details If you need to create a legacy storage account type, please click here. Storage account name ① * dxcorgsa231 Region ① * (US) East US V Performance ① * ② Standard: Recommended for most scenarios (general-purpose v2 account) ○ Premium: Recommended for scenarios that require low latency. Redundancy ② * Make read access to data available in the event of regional unavailability.			- r storage account (depends on the usage	and the options	you choos	e below. Learn more about Azur	e
Make read access to data available in the event of regional unavailability.	Project	details						
Instance details If you need to create a legacy storage account type, please click here. Storage account name ① *					unt. Choose a ne	w or existi	ng resource group to organize a	nd
Instance details If you need to create a legacy storage account type, please click here. Storage account name ① *	Subscrip	otion *		Azure-DXC262AB	12Lab			~
If you need to create a legacy storage account type, please click here. Storage account name ① * Region ① * (US) East US Performance ① * Standard: Recommended for most scenarios (general-purpose v2 account) Premium: Recommended for scenarios that require low latency. Redundancy ① * Geo-redundant storage (GRS) Make read access to data available in the event of regional unavailability.		Resource group	, *					$\overline{\vee}$
Storage account name ① * Region ① * Question ② * Question ③ * Question ⑥ * Questi	Instance details							
Region ① * (US) East US Performance ① * Standard: Recommended for most scenarios (general-purpose v2 account) Premium: Recommended for scenarios that require low latency. Redundancy ① * Geo-redundant storage (GRS) Make read access to data available in the event of regional unavailability.					c here.			
Performance (i) * (ii) Standard: Recommended for most scenarios (general-purpose v2 account) (iii) Premium: Recommended for scenarios that require low latency. Redundancy (ii) * (iii) Geo-redundant storage (GRS) (iv) Make read access to data available in the event of regional unavailability.	Storage	account name	(i) *	dxcorgsa231				
Premium: Recommended for scenarios that require low latency. Geo-redundant storage (GRS) Make read access to data available in the event of regional unavailability.	Region	(i) *		(US) East US				~
Redundancy ① * Geo-redundant storage (GRS) Make read access to data available in the event of regional unavailability.	Perform	ance (i) *		-				t)
✓ Make read access to data available in the event of regional unavailability.						cenarios tri	at require low latericy.	\neg
	Redund	ancy (i) *					<u> </u>	
				wake read acco	ess to datā āvāllā	ole in the (event or regional unavailability.	
Review + create < Previous Next : Advanced >				. Port				

Step-3:



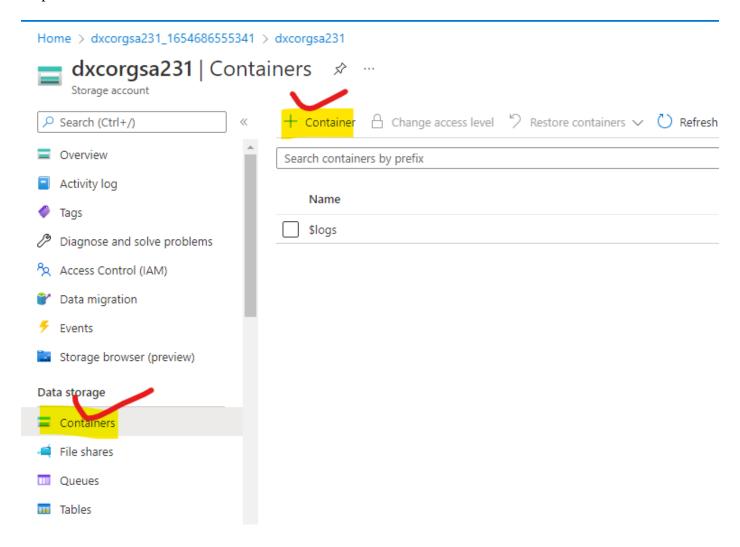


Step-5: The storage Account is created successfully.

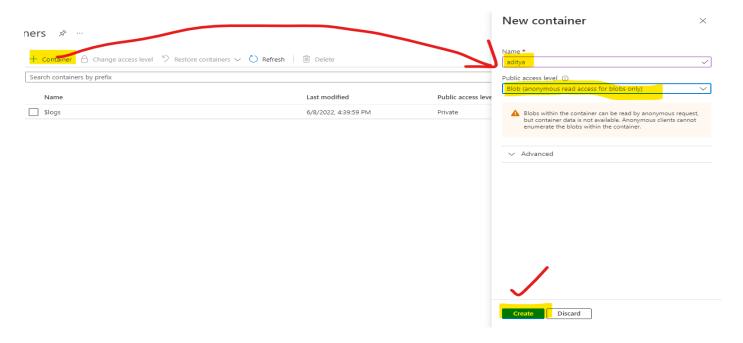


8. Explain the steps with screenshots how to create upload data into Azure Blobs?

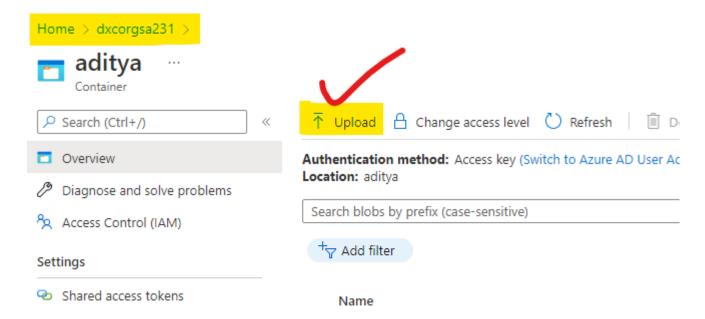
Ans) After creating the storage account the following steps should be followed



Step-2: Create a container and name it



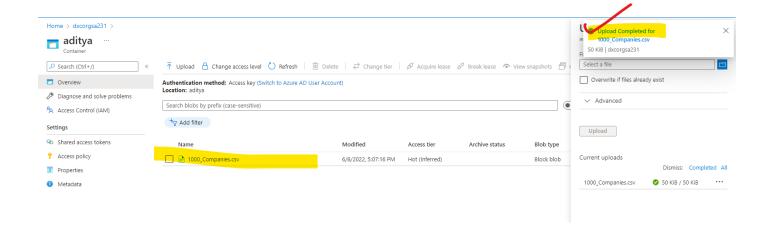
Step-3: The blob will be created and to upload the data into it follow the steps



Step-4: upload the file by browsing from the file explorer

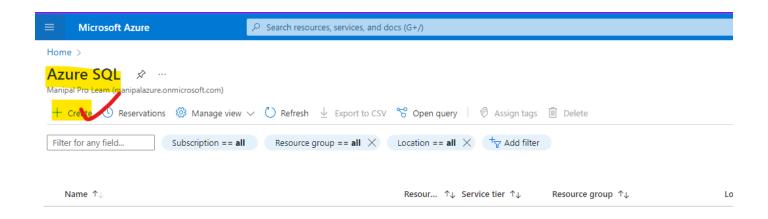


Step-5: the data will be uploaded successfully



9. Explain the steps with screenshots how to create connect SQL Database in Azure ?

Ans)step-1: search for azure sql in search bar





Step-2:after click on create follow the steps

Home > SQL databases > Create SQL Database >

Create SQL Database Server

Microsoft

Enter required settings for this server, including providing a name and location. This server will be created in the same subscription and resource group as your database.

Server name *	dxcsv1	V
		.database.windows.net
Location *	(US) East US	~

Authentication

Select your preferred authentication methods for accessing this server. Create a server admin login and password to access your server with SQL authentication, select only Azure AD authentication Learn more $\underline{\omega}$ using an existing Azure AD user, group, or application as Azure AD admin Learn more $\underline{\omega}$, or select both SQL and Azure AD authentication.

Authentication method	Use SQL authentication
	Use only Azure Active Directory (Azure AD) authentication
	Use both SQL and Azure AD authentication
Server admin login *	azueruser
Password *	······································
Confirm password *	······································

Home > SQL databases >

Create SQL Database

Server * (i)	(new) dxcsv1 (East US)			
	Create new			
Want to use SQL elastic pool? (i)	◯ Yes ● No			
Compute + storage * ①	General Purpose Gen5, 2 vCores, 32 GB storage, zone redundant disabled Configure database			

Backup storage redundancy

Choose how your PITR and LTR backups are replicated. Geo restore or ability to recover from regional outage is only available when geo-redundant storage is selected.

) Locally-redundant backup storage Backup storage redundancy (i)) Zone-redundant backup storage Geo-redundant backup storage



Selected value for backup storage redundancy is Geo-redundant backup. storage. Database backups will be geo-replicated which might impact your data residency requirements. Learn more ™

Review + create

Next: Networking >

Step-4:



Microsoft

Review + create Basics Networking Security Additional settings Tags

Product details

SQL database by Microsoft Terms of use | Privacy policy

Estimated cost per month

View pricing details

Terms

By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) auti my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the additional details see Azure Marketplace Terms. ☐

Basics

Subscription Azure-DXC262AB12Lab

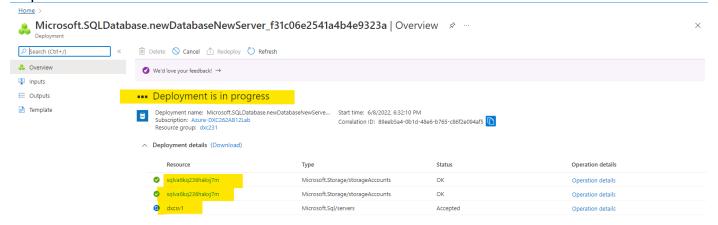
Resource group dxc231 East US Region Database name dxcdb231 Server (new) dxcsv1

Authentication method SQL authentication

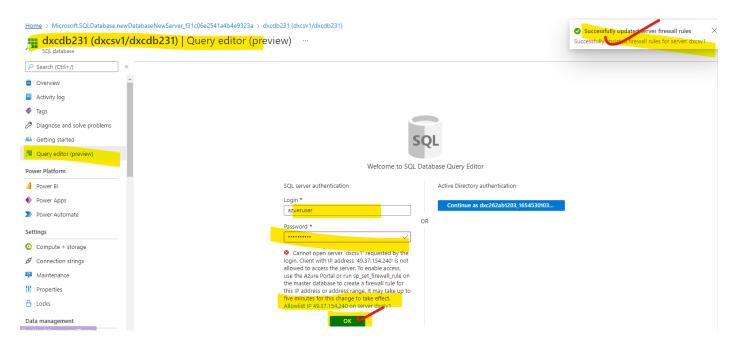
Server admin login <mark>azue</mark>ruser

Download a template for automation < Previous

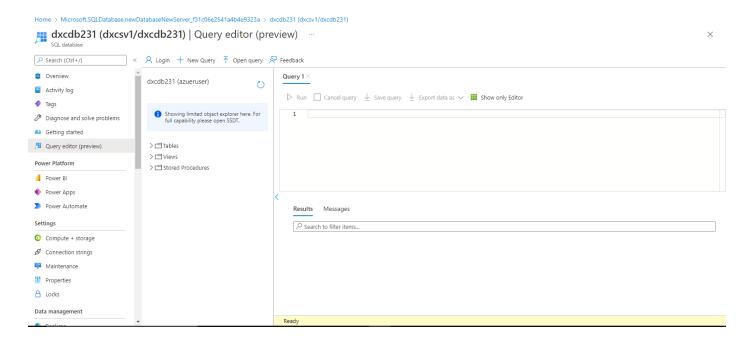
Step-5:



Step-6:

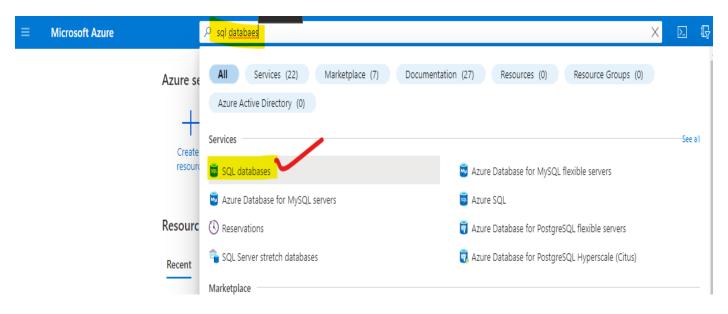


Step-7: login with the credentials and allow firewall to allow the changes and click on ok the sql database is available now

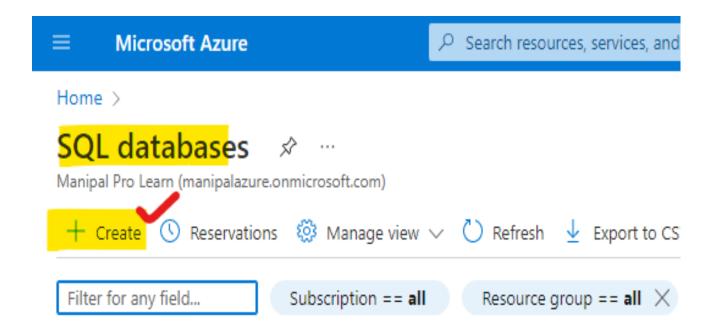


- 10. Explain the steps with screenshots how to insert data into azure SQL database?
- Ans) To enter the data into the data base we have to follow the steps mentioned below

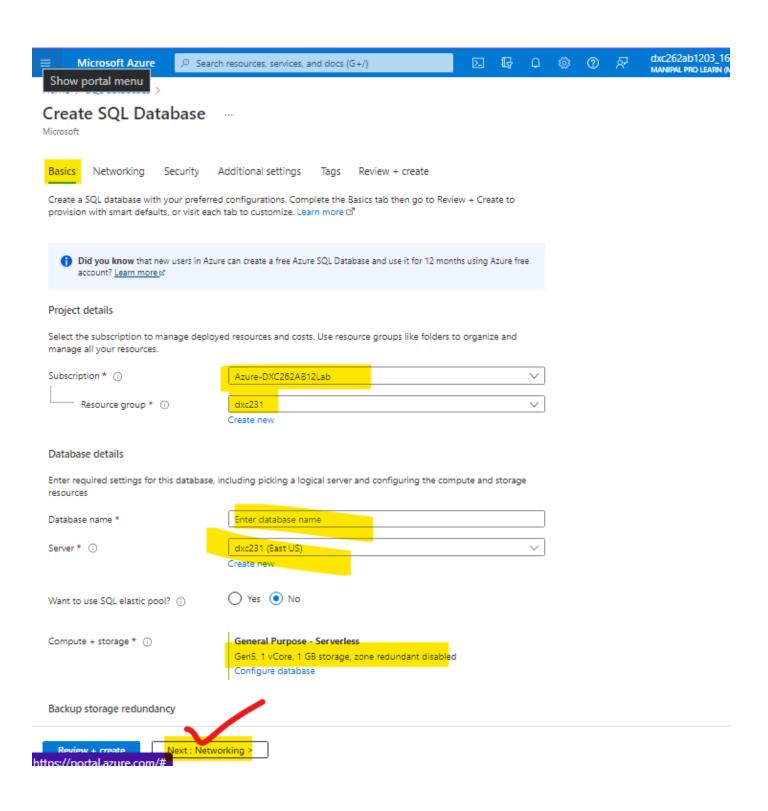
Step-1: search for Azure sql databases and select the AZURE SQl databases from the search results



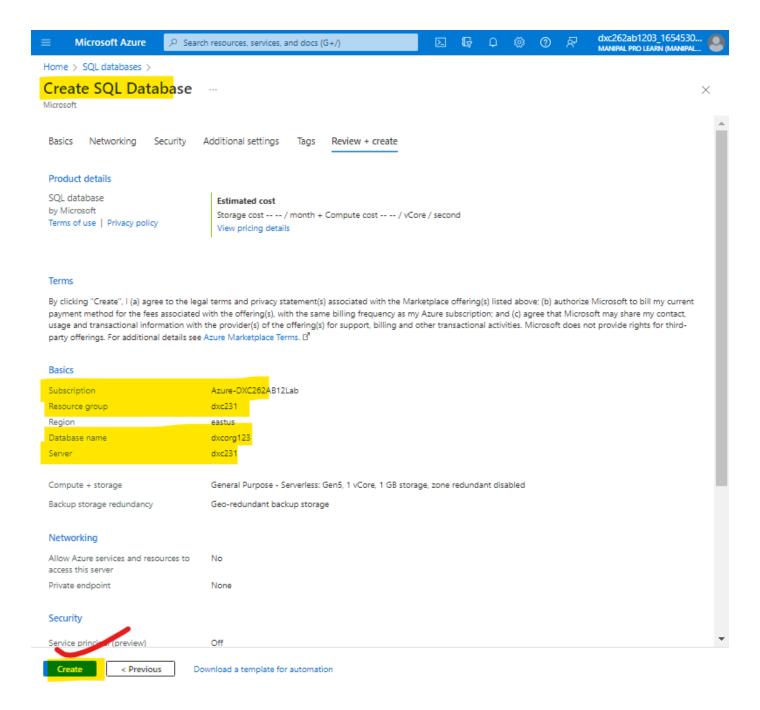
Step-2: after selecting the Sql databases. Click on create button as shown below



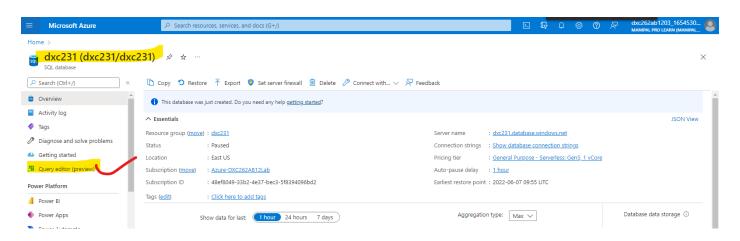
Step-3: select all options as mentioned below



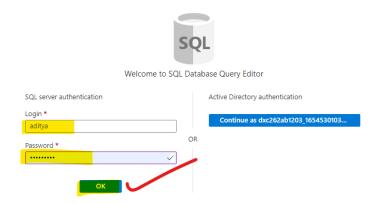
Step-4: after completing this step navigate to the next menus with out changing any settings and click on create



Step-5: after clicking on create it takes some time to deploy after that we can access the Database and click on query editor



Step-6: login with your login credentials



Step-7: insert the data by using the traditional SQL methods.

