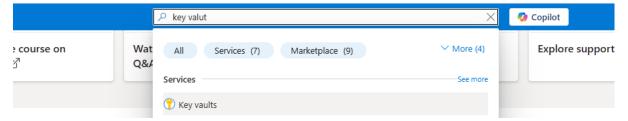
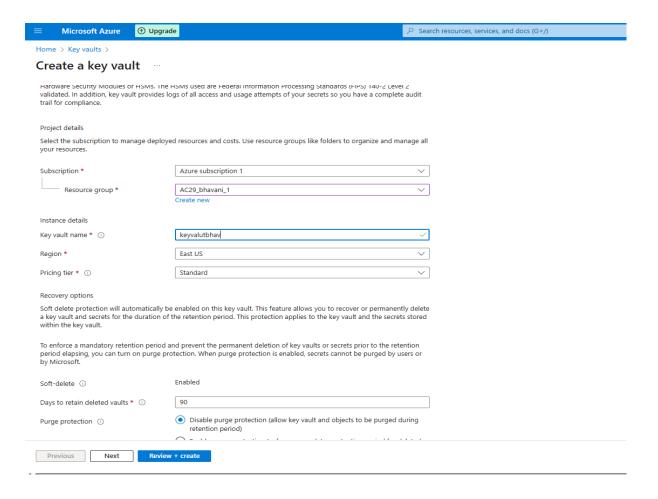
Homework | Cycle 29 | Session 17

- Create an Azure Key Vault and establish a connection using the Key Vault as a linked service within the pipeline.
- Develop a Logic App to handle email notifications and integrate it within the Synapse pipeline to send an email whenever an error occurs during pipeline execution.
- In this activity we are not using direct password directly in the linked service to connect to databse, instead of that in the linked service we use the azure key valut option and then connect to the database and also developing logic app to send email error deatils if something pipeline failes in the activity.

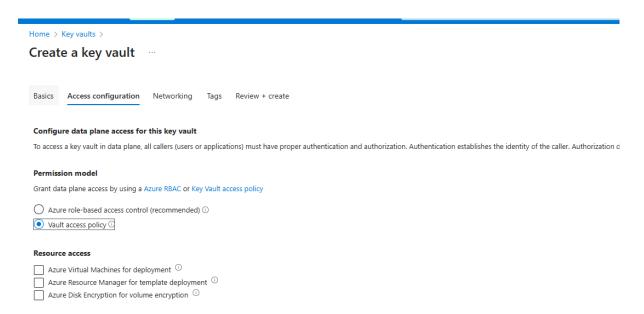
Login to potal.azure.com and search for key valuts and open



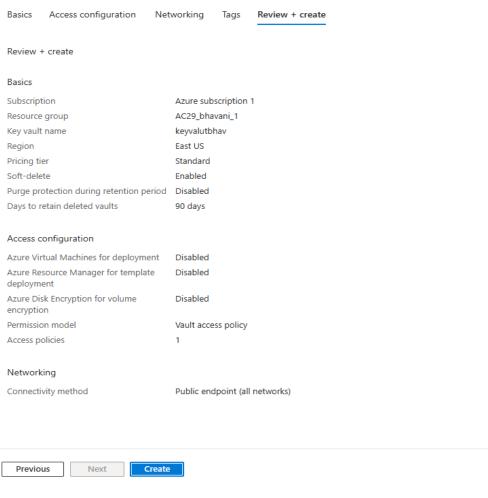
Select Resource group and give key valut name and click on next

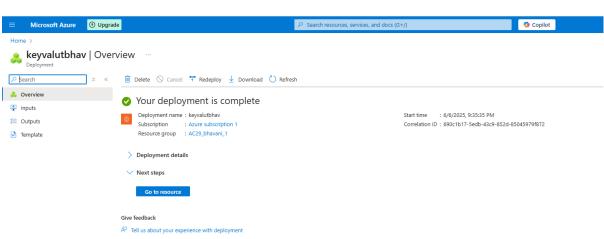


And in the access configuration tab only provide access policy as Valut access policy and click on create

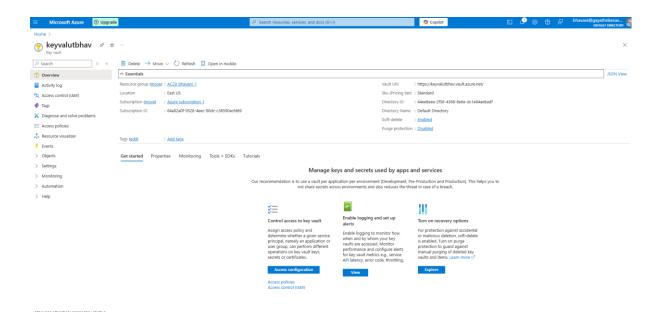


Create a key vault



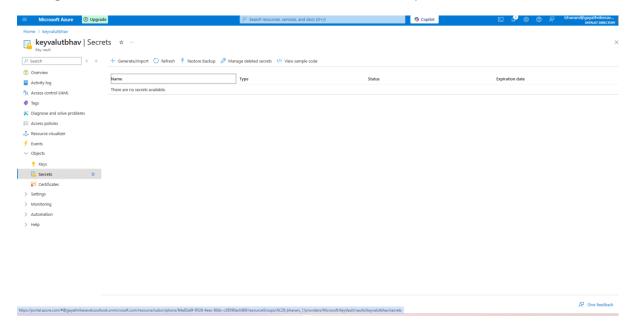


Go to resource

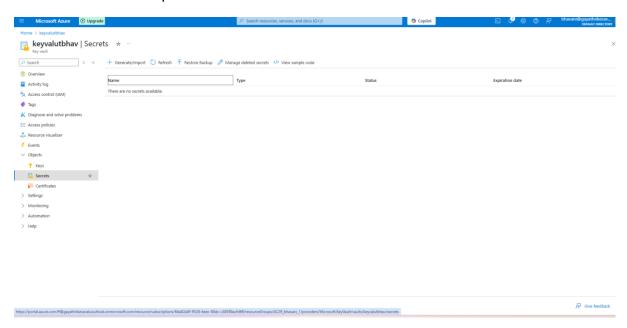


Go to Objects and expand and secrets: Here we are creating secret as we dont want to expose our db password at the password coloumn in the linked service creation page

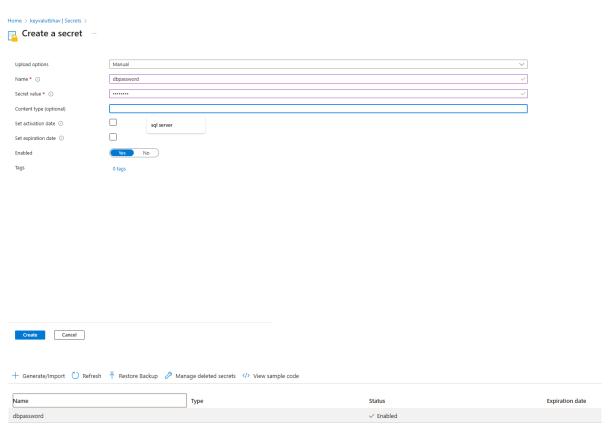
Secret will hold your actual db password and it will just expose the name which you have given for that and it will fetch in the linked service db password coloumn.

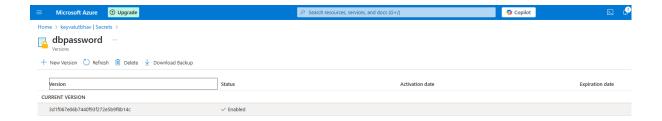


Click on Generate/Import

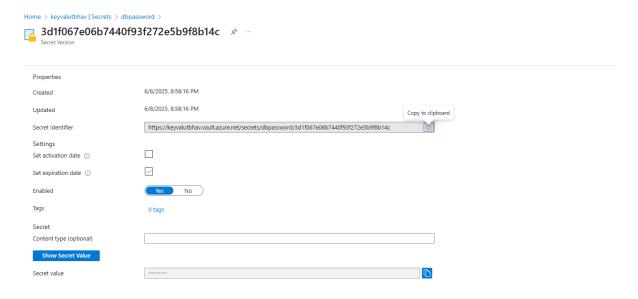


Give Name and your actual database password and click on create

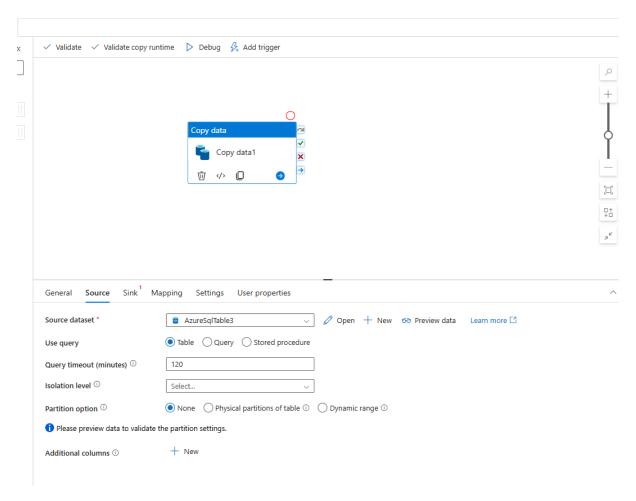




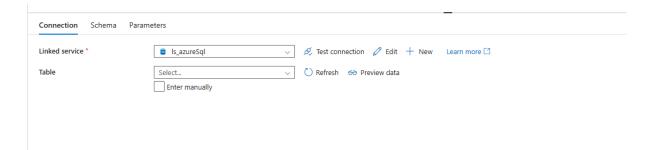
Open and see how it is created

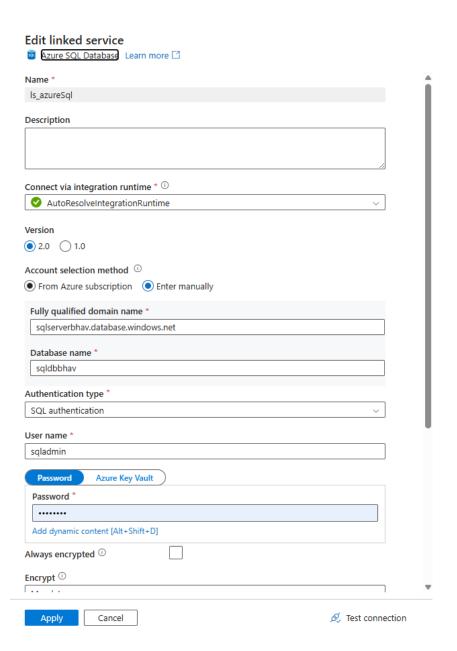


Create pipeline and select source as azure sql and click on open

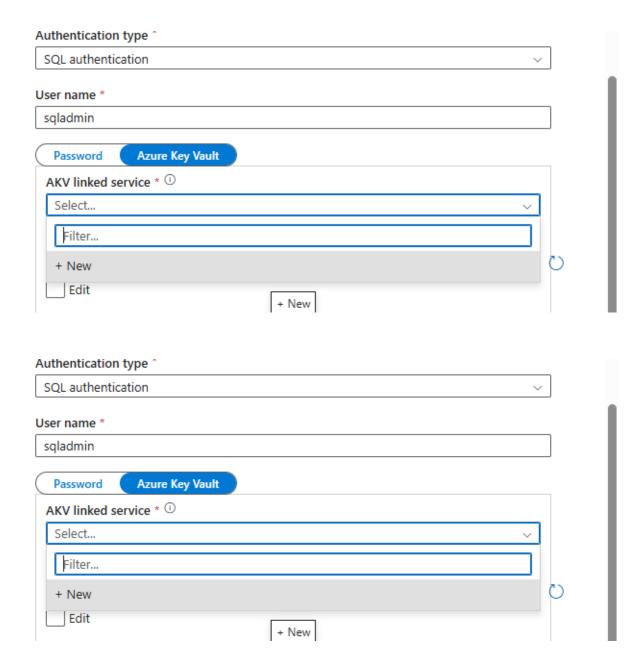


Click on edit and

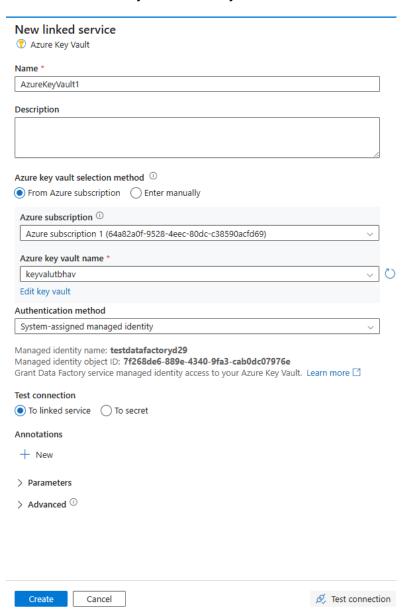


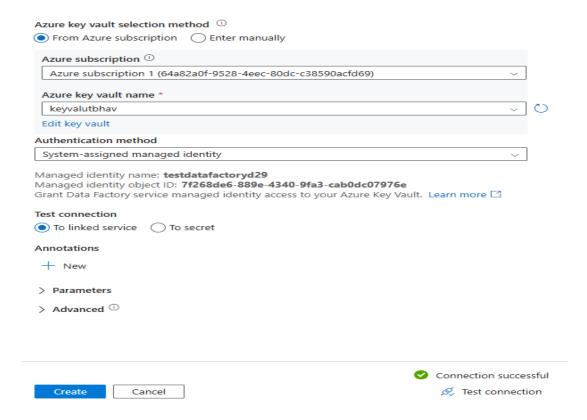


Select Azure Valut and create AKV linked service by selecting new

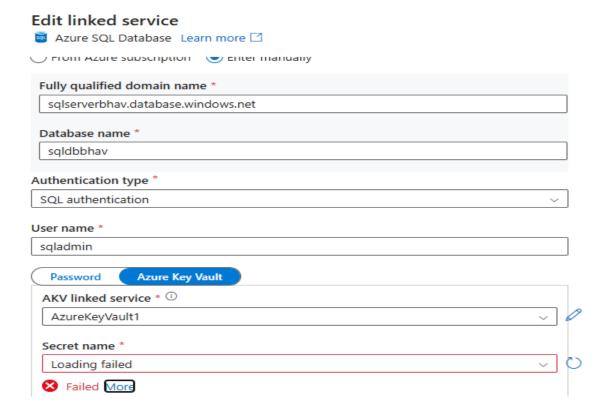


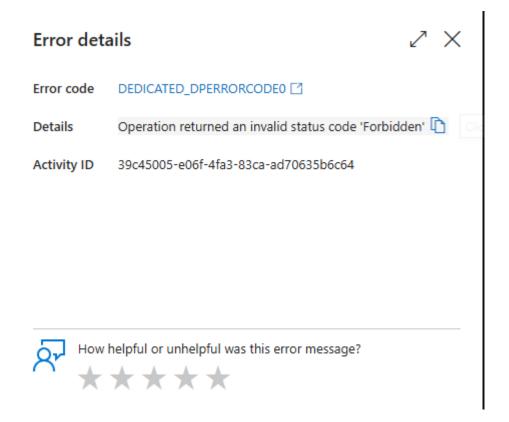
Select the azure key valut which you craeted and Test connection



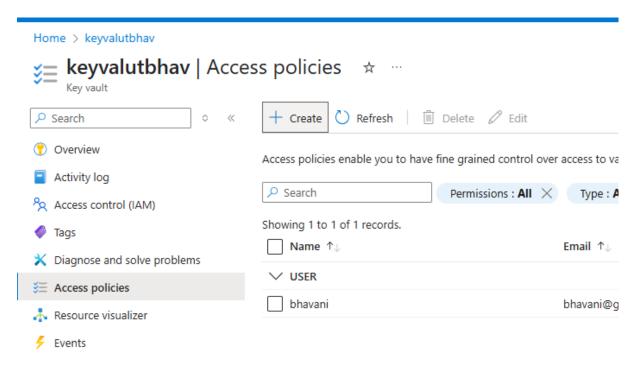


Loading the Scretname was failed as forbidden error which means it because of access related issues.

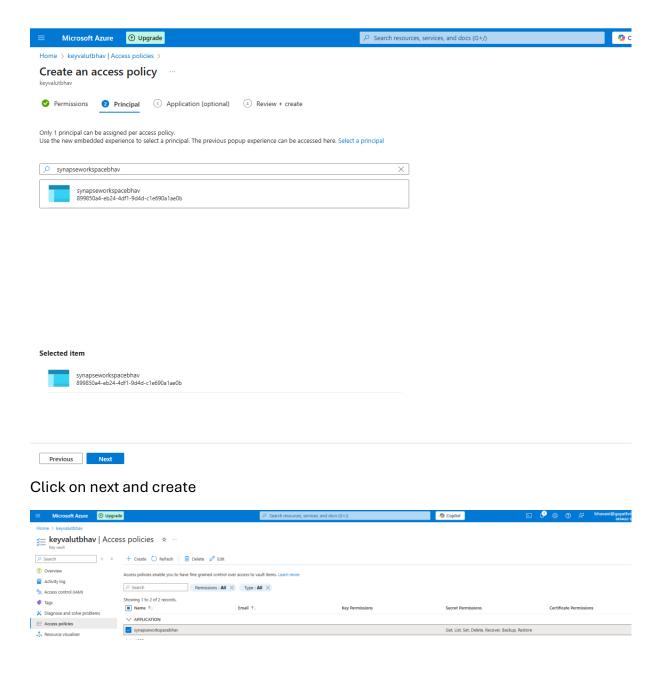




To create access, go to your agile key valut and from left side go to access policies tab and click on create access

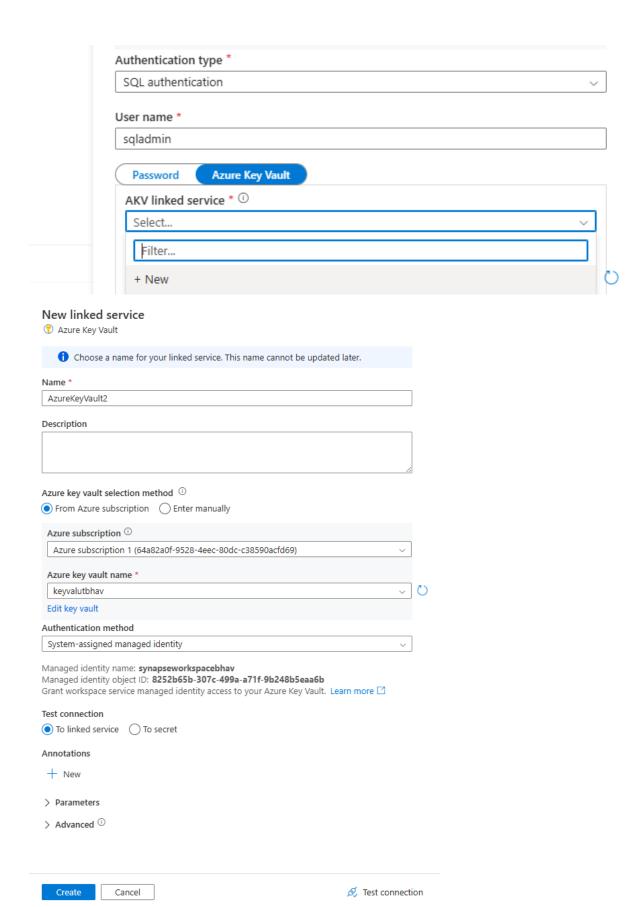


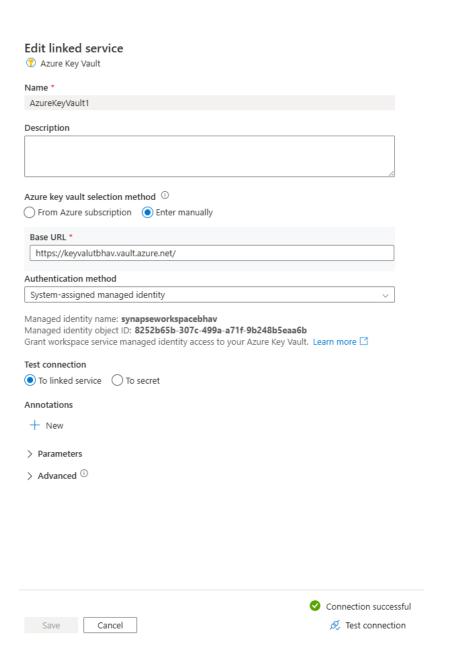
Since we stored our password in secrets select all permissions in the secret permissions coloumn and clcik on next and in the principal tab select your synapse workspace name to give access

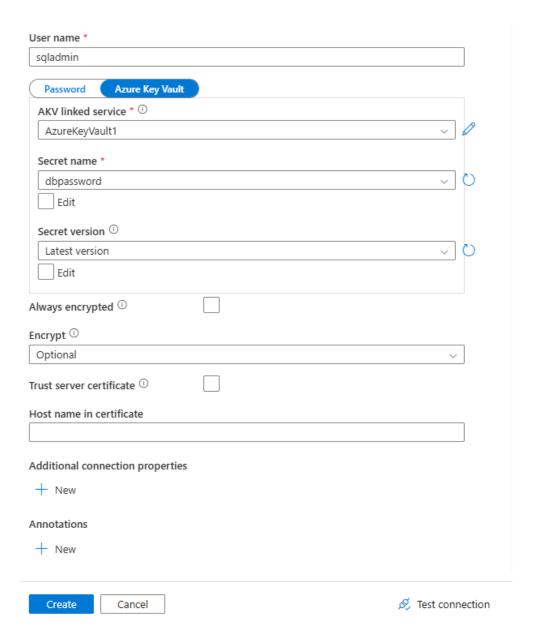


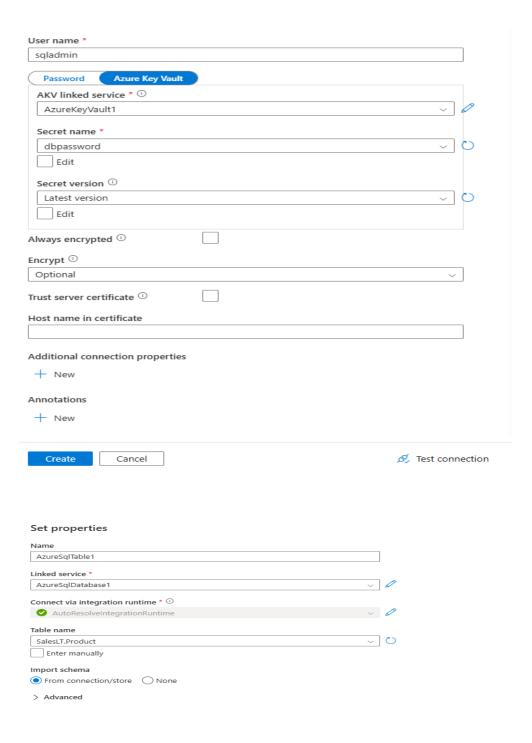
Once you created the access, go to linked service and at password field instead of giving password and select azure key valut

You can load your secret key through AKV linked service to do that clcik on new and enter details and Test connection

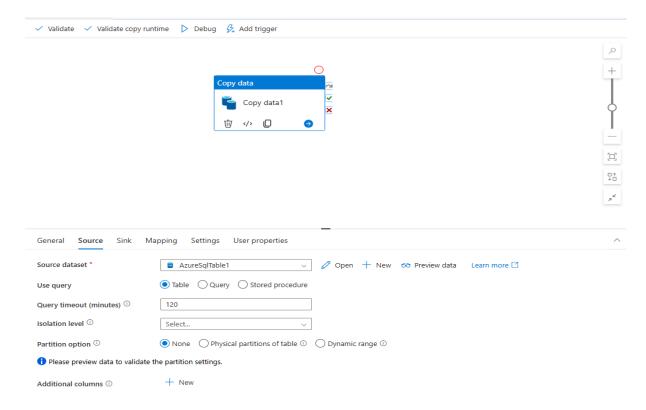




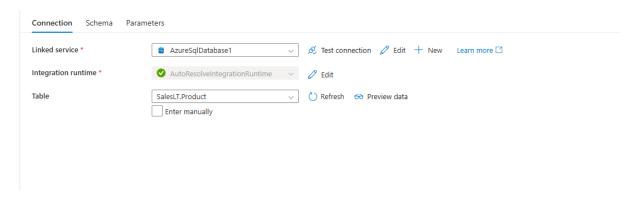


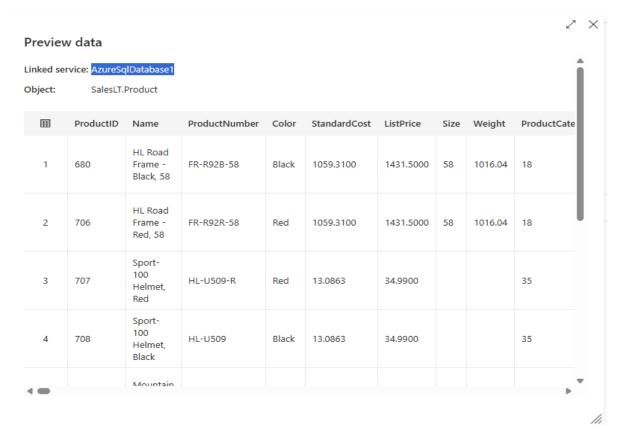


To do the copy activity, craete a pipeline and select azure sql database and csv format from source tab



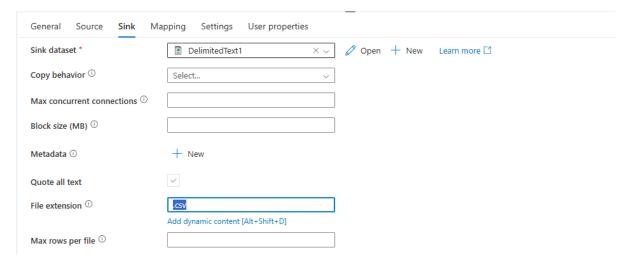
Click on open and click on preview data to see data at Table field.





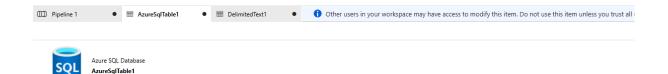
To save the data in ADLS GEN2 select Azure Data Lake Gen2 and select csv format.

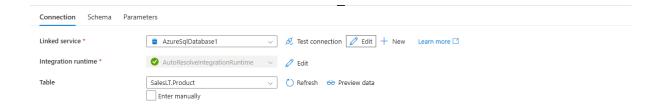
Once you sleected then change the format to .csv instead of .txt

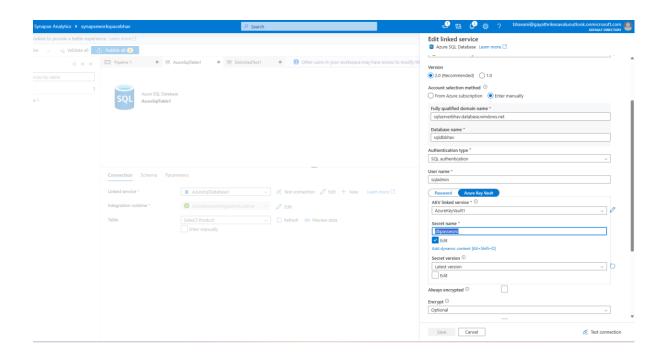


Note: Key valut comes into the picture in the dataset, open your dataset to use key valut, As this activity mainly on to use Azure key valut instead of directly providing password in the Linked service in the password field, we are going to check if the azure key valut selected or not.

To do that clcik on Open dataset from source tab there you will be able to see the linked service and click on edit at linked service field.





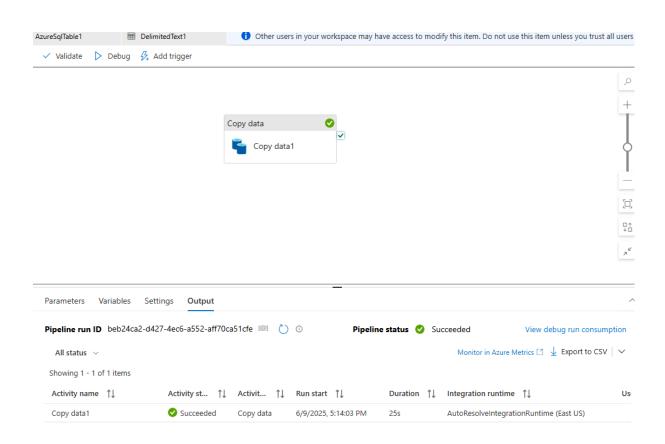


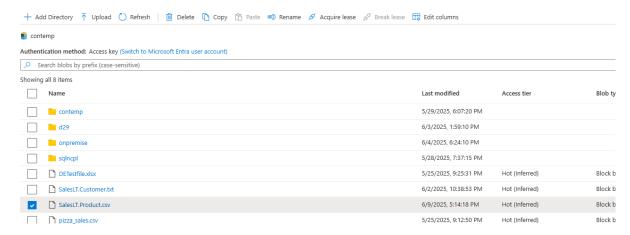
Publish all

You are about to publish all pending changes to the live environment. Learn more

Pending changes (5)

NAME	CHANGE	EXISTING	
→ Pipelines			
DD Pipeline 1	(New)	-	
∨ Datasets			
■ AzureSqlTable1	(New)	-	
■ DelimitedText1	(New)	-	
✓ Linked services			
AzureSqlDatabase1	(New)	-	
AzureKeyVault1	(New)	-	

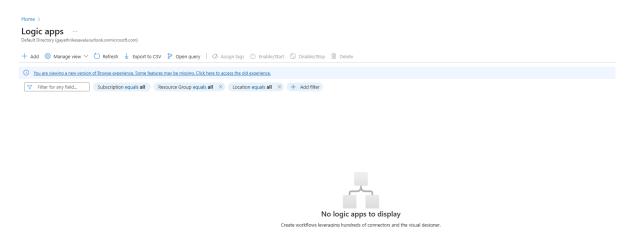




Develop a logic app to handle email notifications, and integrate it within the Synapse pipeline to send an email whenever an error occurs during pipeline execution.

Note:If something fails while executing pipeline to send error details through email we need logic app.

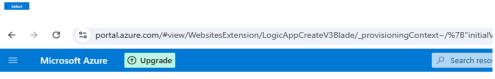
• Search for logic app from search and open, then clcik on add



Select multi-tenant one as this is enough for our practice

Create Logic App

The proving plant determine the resource anothers, standing and private above cogs, App Instanty options of							
	Consumption		Standard				
Hosting plans	Multi-tenant Fully managed and easy to get started.	Workflow Service Plan Single tenant runtime with in-app connectors and scaling features.	App Service Environment V3 Single tenant runtime with full isolation and scale out feature across App Service plans.	Hybrid PREVIOUS Local processing and multi-cloud support with Kubernetes Event-Driven Autoscaling.			
Compute	Shared	Dedicated	Dedicated	Customer managed			
Networking	Public cloud	VNET Integration	VNET Integration	Local network access			
Pricing	Pay-per-operation	Per workflow service plan instance	Per App Service for App Service Environment instance	Per vCPU hour of Kubernetes cluster			



Home > Logic apps > Create Logic App >

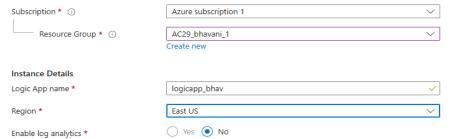
workflows without writing a single line of code.

Create Logic App (Multi-tenant)

Tags Review + create Basics Create a logic app, which lets you group workflows as a logical unit for easier management, deployment and sharing of resources. Workflows let you connect your business-critical apps and services with Azure Logic Apps, automating your

Project Details

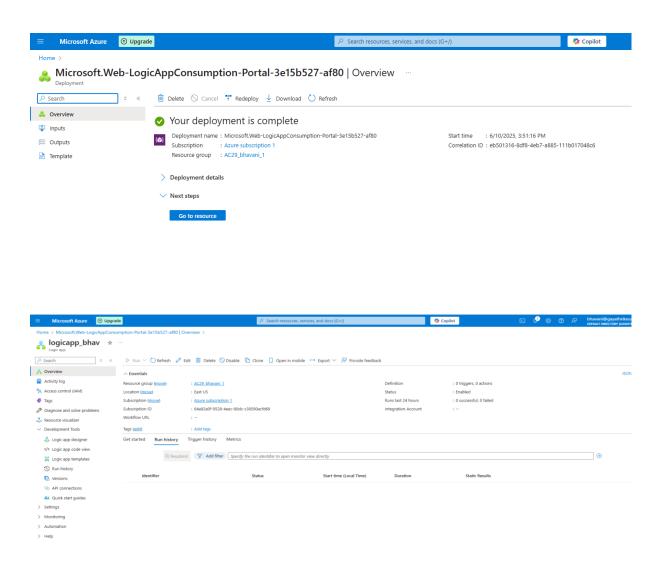
Select a subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.



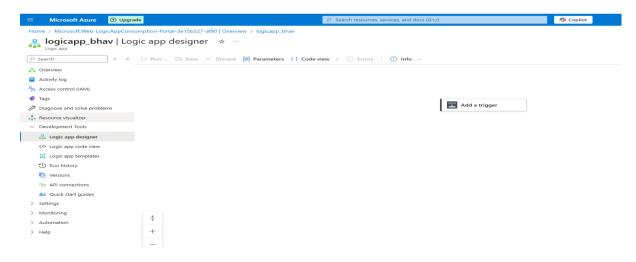
⚠ There are no log analytics workspace resources in the selected subscription. In order to enable log analytics, either create a new log analytics workspace resource or switch to a subscription which already has one.

Review + create < Previous

Next : Tags >

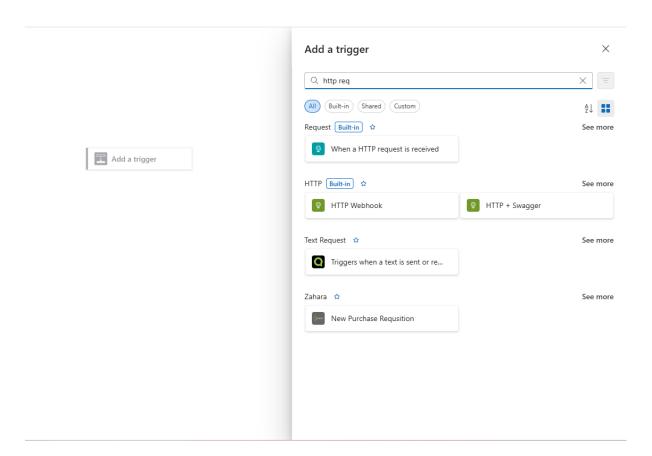


Go to resource and click on deployment tools and then open logic app designer.

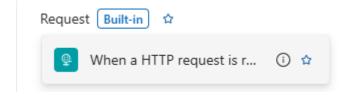


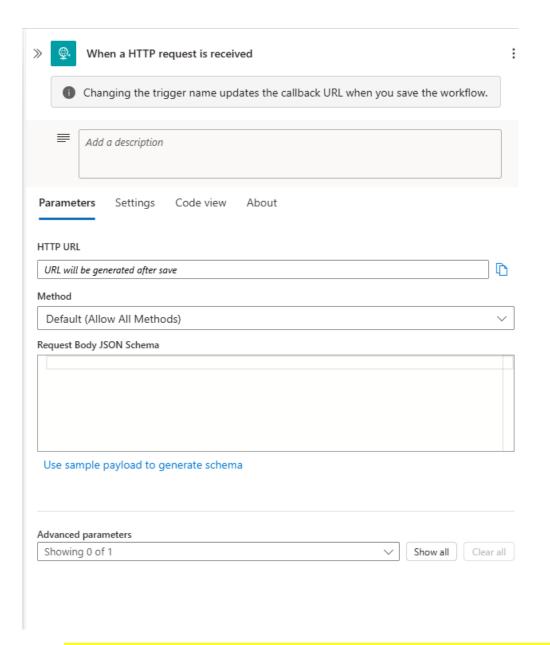
Note:The below activity is as we are going to send email we need to select http request and enter your method type and email format and also metion your error details which you want to display like pipeline details by doing below steps:

Click on Add trigger and serach for http request



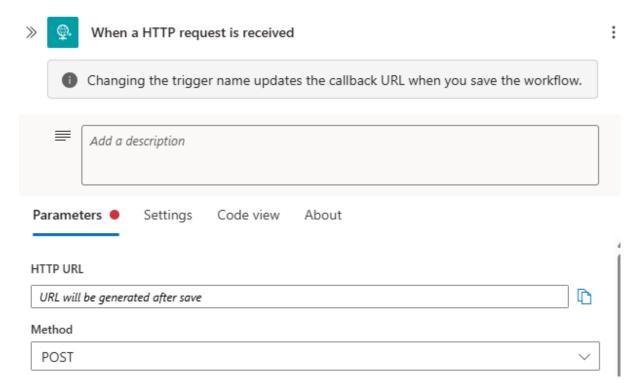
Select the http request received one as below from results





Note: The http url will get automatically generated when you save this page, so you dont need to enter explicitly

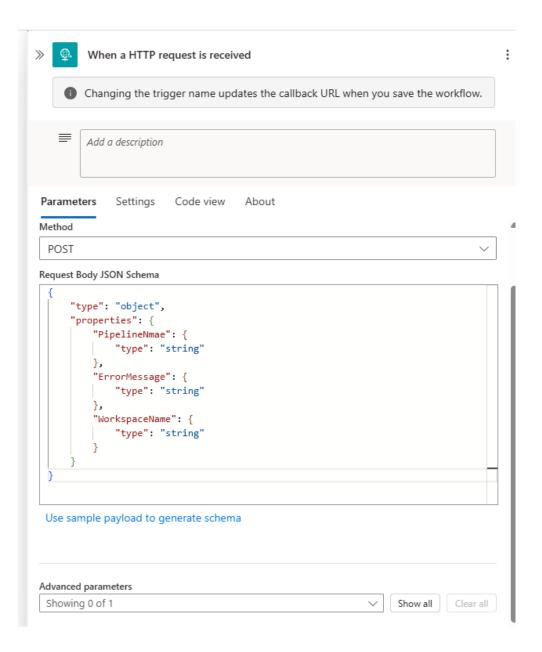
Select POST as your method



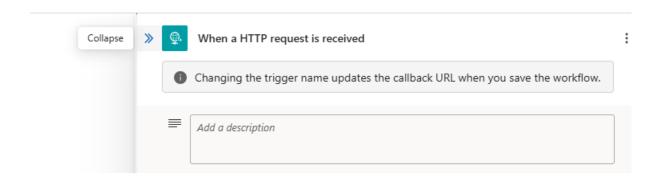
Give the details in the below json format and clcik on Done.

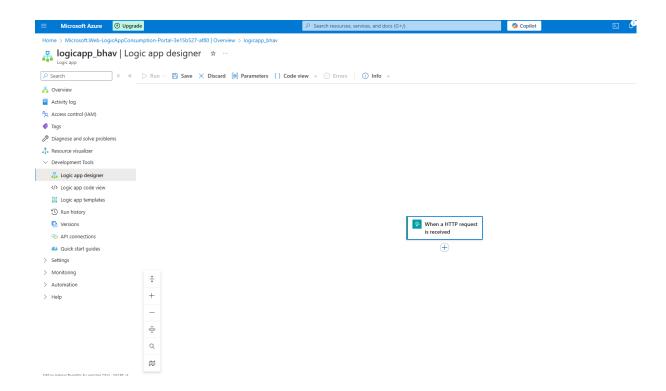
```
{
    "PipelineNmae" : "jfvnjkfdvnkfd",
    "ErrorMessage" : "bdjsfnkdsjfs",
    "WorkspaceName" : "ryetureteirutre"
}
```

Parameters Settings Code view About HTTP URL 0 URL will be generated after save Method POST Request Body JSON Schema "type": "object", "properties": { "PipelineNmae": { "type": "string" "ErrorMessage": { "type": "string" "WorkspaceName": { "type": "string"

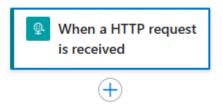


To save the template just clcik on collapse button as below

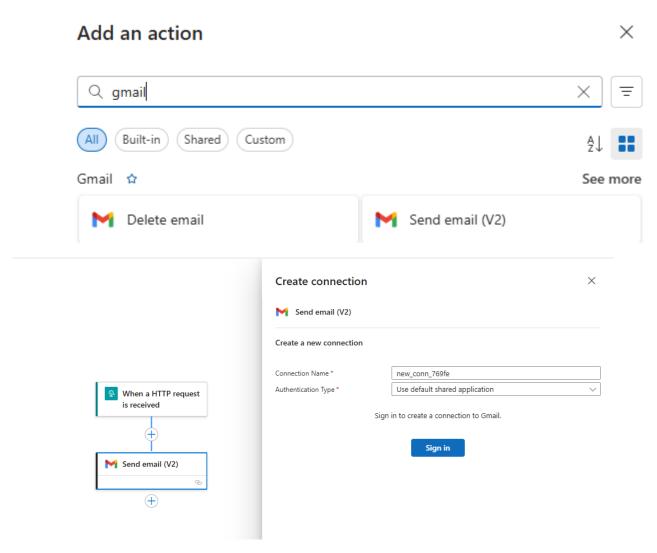




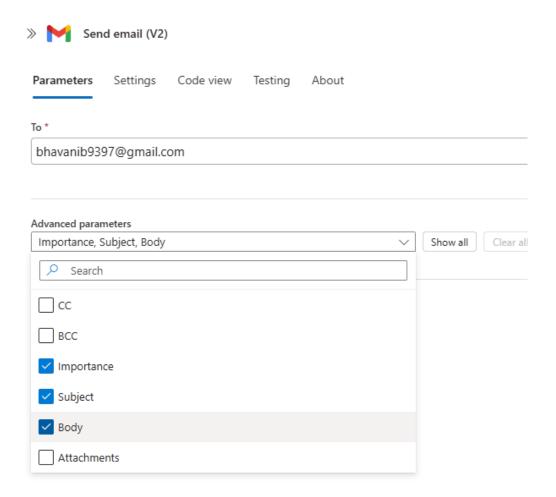
Note: To add an activity Click on simbol (email in real time genearally people will chosse outlook activity but since we dont have any smtp and all details, so here we are choosing GMAIL)



• Search for Gmail and select "send email(V2)"

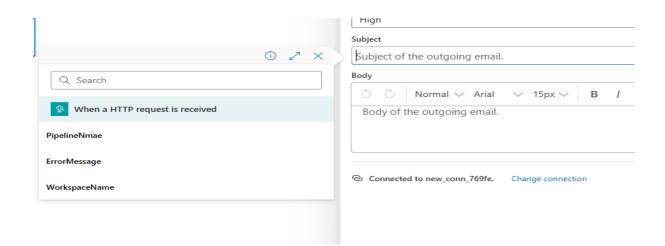


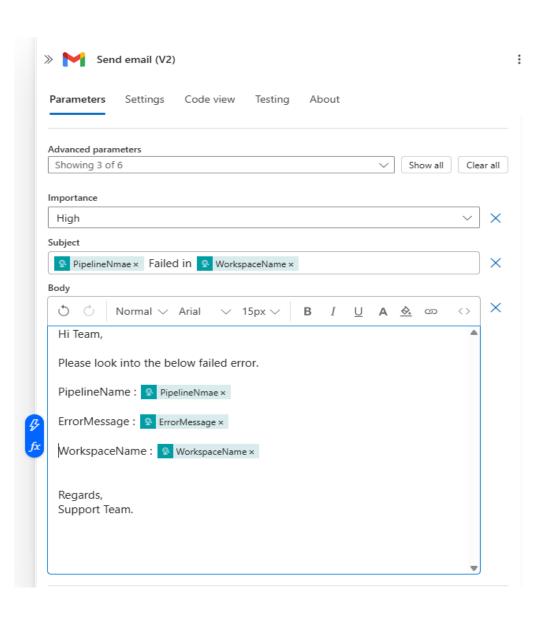
CLICK ON SIGNIN

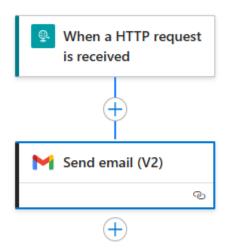


Give importance High and at the subject feild click on power simbol, so that you are going to get pipeline.









Click on Save to get the http url generated automatically. And clcik on http req received box to see the genrated url.



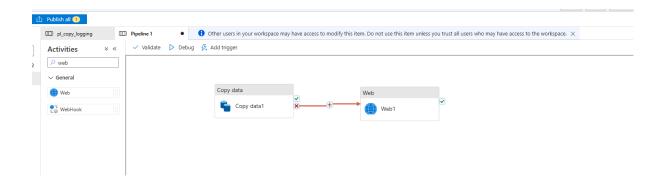




https://prod-

24.eastus.logic.azure.com:443/workflows/d5a7ee5485b14ceaa43067ecc85156bf/trigg ers/When_a_HTTP_request_is_received/paths/invoke?api-version=2016-10-01&sp=%2Ftriggers%2FWhen_a_HTTP_request_is_received%2Frun&sv=1.0&sig=z723ZnoWSpwOu1tDKcKNwHx1UwIV8lafKOWSsvetkbY

Go to Azure and choose webactivity and link copy data activity to webactivity when copy data failes



In the web activity setting tab give method as Post and Body add as dynamic content as below

```
{
    "PipeLineName" : "@{pipeline().Pipeline}",
    "ErrorMessage" : "@{activity('Copy data1').Error.Message}",
    "workspacename" : "@{pipeline().DataFactory}"
}

{
    "PipeLineName" : "@{pipeline().Pipeline}",
    "ErrorMessage" : "@{activity('Copy data1').Error.Message}",
    "workspacename" : "@{}"
}

Position 137 @{} expressions must contain an expression
```

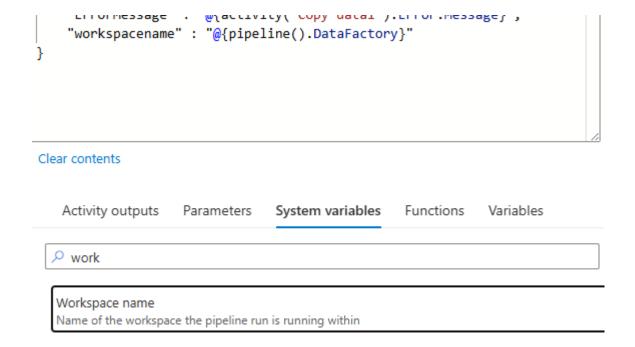
Clear contents

Activity outputs Parameters System variables Functions Variables

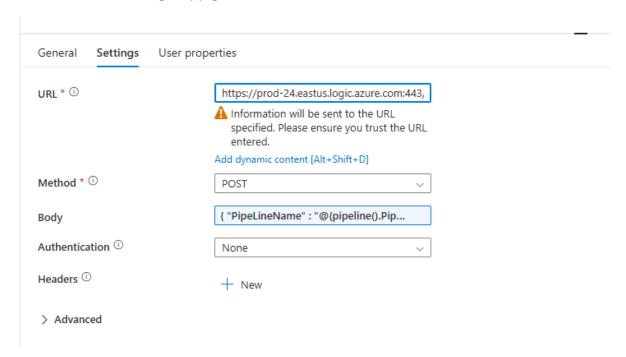
∠ work

Workspace name

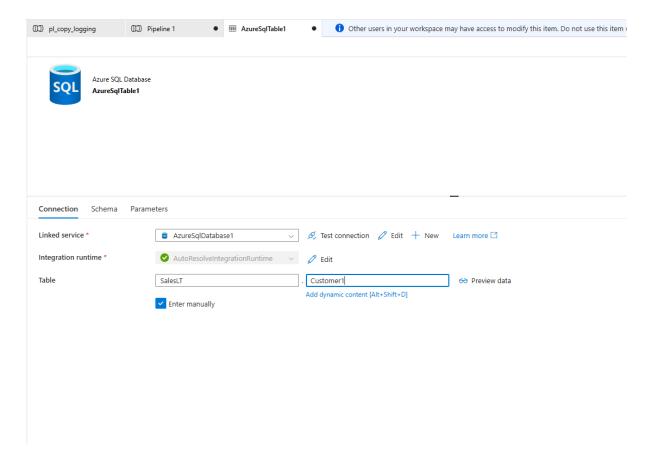
Name of the workspace the pipeline run is running within



Paste the URL from logic app generated one



To make the pipeline fail and i modified Table feild details by checking enter manually and entered the table customer1 which does not exist.



Now debug and see pipeline failed and email has bben to sent to my email as below

