

NAME –MAHALAKSHMI S

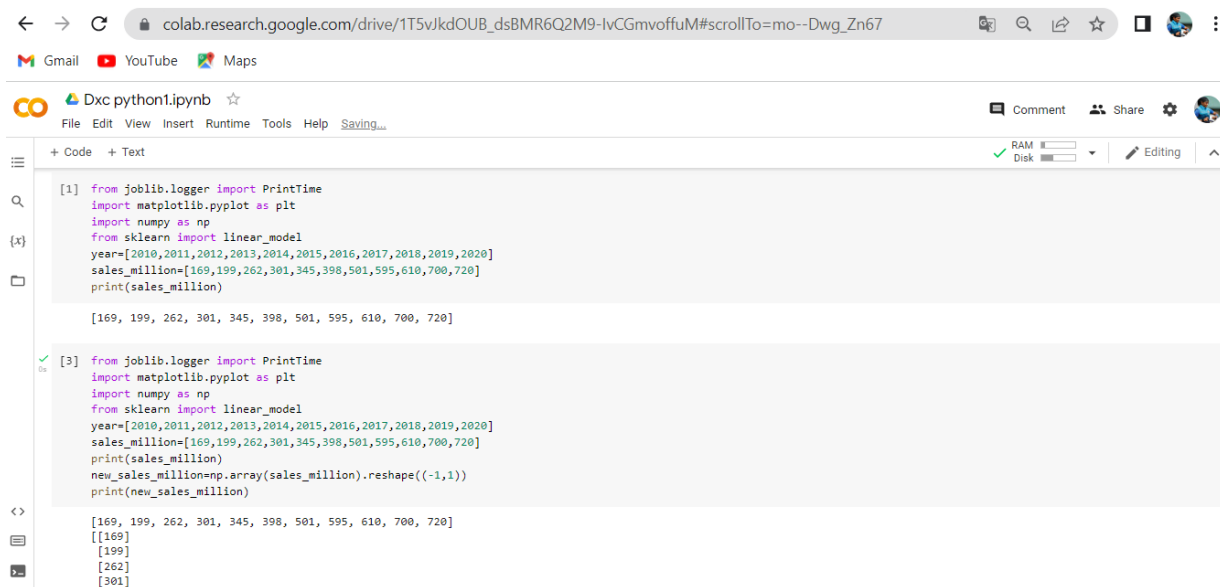
ROLLNO – DXC-262AB-1229

BATCH – DXC-262-ANALYTICS-B12-AZURE

COMPANY – DXC TECHNOLOGY

ASSIGNMENT 11

1. Write a python program to predict car sales of a company by using below data, year : 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 Sales in millions: 169 199 262 301 345 398 501 595 610 700 720 display outcome using linear regression method



The screenshot shows a Google Colab notebook titled "Dxc python1.ipynb". The notebook contains two code cells. The first cell, labeled [1], imports necessary libraries and defines the data for years and sales in millions. The second cell, labeled [3], imports the same libraries and data, but also includes a line to reshape the sales data into a 2D array. The output of the first cell is a list of sales values, and the output of the second cell is a 2D array of the same sales values.

```
[1] from joblib.logger import PrintTime
import matplotlib.pyplot as plt
import numpy as np
from sklearn import linear_model
year=[2010,2011,2012,2013,2014,2015,2016,2017,2018,2019,2020]
sales_million=[169,199,262,301,345,398,501,595,610,700,720]
print(sales_million)

[169, 199, 262, 301, 345, 398, 501, 595, 610, 700, 720]
```

```
[3] from joblib.logger import PrintTime
import matplotlib.pyplot as plt
import numpy as np
from sklearn import linear_model
year=[2010,2011,2012,2013,2014,2015,2016,2017,2018,2019,2020]
sales_million=[169,199,262,301,345,398,501,595,610,700,720]
print(sales_million)
new_sales_million=np.array(sales_million).reshape((-1,1))
print(new_sales_million)

[169, 199, 262, 301, 345, 398, 501, 595, 610, 700, 720]
[[169]
 [199]
 [262]
 [301]
```

```
+ Code + Text
from joblib.logger import PrintTime
import matplotlib.pyplot as plt
import numpy as np
from sklearn import linear_model
year=[2010,2011,2012,2013,2014,2015,2016,2017,2018,2019,2020]
sales_million=[169,199,262,301,345,398,501,595,610,700,720]
print(sales_million)
new_sales_million=np.array(sales_million).reshape((-1,1))
print(new_sales_million)

[169, 199, 262, 301, 345, 398, 501, 595, 610, 700, 720]
[[169]
 [199]
 [262]
 [301]
 [345]
 [398]
 [501]
 [595]
 [610]
 [700]
 [720]]

[4] reg_model=linear_model.LinearRegression()
reg_model.fit(new_sales_million,year)
```

```
+ Code + Text
[4] reg_model=linear_model.LinearRegression()
reg_model.fit(new_sales_million,year)

LinearRegression()

[5] reg_model=linear_model.LinearRegression()
reg_model.fit(new_sales_million,year)
print("Coefficient :",reg_model.coef_)
print("Intercept :",reg_model.intercept_)

def graph(formula,x_range):
    x=np.array(x_range)
    y=eval(formula)
    plt.plot(x,y)

Coefficient : [0.01654049]
Intercept : 2007.782331208535
```



2. Write python program to generate possible tuples from any two sample Lists

colab.research.google.com/drive/1T5vJkdOUB_dsBMR6Q2M9-lvCGmvoffuM#scrollTo=r-wR3O9b6n7W

Gmail YouTube Maps

Dxc python1.ipynb

File Edit View Insert Runtime Tools Help All changes saved

+ Code + Text

```
test_list = [7,9,4]

print("The original list is: " + str(test_list))

test_tup = (9, 10)

test_list += test_tup

print("The container after addition: " + str(test_list))
```

The original list is: [7, 9, 4]
The container after addition: [7, 9, 4, 9, 10]

colab.research.google.com/drive/1T5vJkdOUB_dsBMR6Q2M9-lvCGmvoffuM#scrollTo=r-wR3O9b6n7W

Gmail YouTube Maps

Dxc python1.ipynb

File Edit View Insert Runtime Tools Help All changes saved

+ Code + Text

```
test_tuple1 = (6,9)
test_tuple2 = (2,5)

print("the original tuple 1: " + str(test_tuple1))
print("the original tuple 1: " + str(test_tuple2))

res = [(a, b) for a in test_tuple1 for b in test_tuple2 ]
res = res + [(a,b) for a in test_tuple2 for b in test_tuple1 ]

print("the filtered tuple : "+ str(res))
```

the original tuple 1: (6, 9)
the original tuple 1: (2, 5)
the filtered tuple : [(6, 2), (6, 5), (9, 2), (9, 5), (2, 6), (2, 9), (5, 6), (5, 9)]

The screenshot shows a Google Colab notebook titled "Dxc python1.ipynb". The code is as follows:

```
+ Code + Text
[7] the original tuple 1: (6, 9)
    the original tuple 1: (2, 5)
    the filtered tuple : [(6, 2), (6, 5), (9, 2), (9, 5), (2, 6), (2, 9), (5, 6), (5, 9)]

[x] test_list = [(7,9), (4,6), (8, 6, 7),(1, ), (5, ), (3, 4, 5, 6), (1, 2)]

print("the original list: " + str(test_list))

K = 1

res = [ele for ele in test_list if len(ele) != K]

print("filtered list : " + str(res))

the original list: [(7, 9), (4, 6), (8, 6, 7), (1, ), (5, ), (3, 4, 5, 6), (1, 2)]
filtered list : [(7, 9), (4, 6), (8, 6, 7), (3, 4, 5, 6), (1, 2)]
```

3. Create Azure Databricks & try to connect databricks & powerBI , explain the steps with screenshots.

The screenshot shows the "Create an Azure Databricks workspace" page in the Azure portal. The page is divided into sections: Basics, Networking, Advanced, Tags, and Review + create. The Basics section is active, showing the "Project Details" and "Instance Details" sections.

Project Details

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

Subscription *

Resource group * [Create new](#)

Instance Details

Workspace name *

Region *

Pricing Tier *

[Review + create](#) [< Previous](#) [Next : Networking >](#)

portal.azure.com/#create/Microsoft.Databricks

Microsoft Azure

Home > Create a resource > Azure Databricks >

Create an Azure Databricks workspace

Validation Succeeded

Basics Networking Advanced Tags **Review + create**

Summary

Basics

Workspace name	dxcdatabricks12
Subscription	Azure-DXC262AB12Lab
Resource group	dxcdatabricks1
Region	East US
Pricing Tier	standard

Networking

Deploy Azure Databricks workspace with Secure Cluster Connectivity (No Public IP)	No
Deploy Azure Databricks workspace in your own Virtual Network (VNet)	No

Advanced

[Create](#) [< Previous](#) [Download a template for automation](#)

portal.azure.com/#view/HubsExtension/DeploymentDetailsBlade/~/overview/id/%2Fsubscriptions%2F36cae...

Microsoft Azure

Home >

dxcdatabricks1_dxcdatabricks12 | Overview

Deployment

Search (Ctrl+/) < Delete Cancel Redeploy Refresh

Overview Inputs Outputs Template

We'd love your feedback! →

✓ Your deployment is complete

Deployment name: dxcdatabricks1_dxcdatabricks12
Subscription: Azure-DXC262AB12Lab
Resource group: dxcdatabricks1

Start time: 6/11/2022, 4:12:41 PM
Correlation ID: 99c41f3e-e854-442f-84a7-9ed4e416b62c

Deployment details (Download)
Next steps
[Go to resource](#)

Deployment succeeded
Deployment 'dxcdatabricks1_dxcdatabricks12' to resource group 'dxcdatabricks1' was successful.
[Go to resource](#) [Pin to dashboard](#)

Cost Management
Get notified to stay within your budget and prevent unexpected charges on your bill.
[Set up cost alerts >](#)

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dxcdatabricks12

Azure Databricks Service

Search (Ctrl+/)

Delete

Overview

Activity log

Access control (IAM)

Tags

Settings

Virtual Network Peerings

Encryption

Properties

Locks

Automation

Tasks (preview)

Export template

Support + troubleshooting

New Support Request

Essentials

Status : Active

Resource group : [dxcdatabricks1](#)

Location : East US

Subscription : [Azure-DWC262AB12Lab](#)

Subscription ID : 36cae3b3-533b-4658-a187-08120bcd9e4

Tags ([edit](#)) : [Click here to add tags](#)

Managed Resource Group : [databricks-rg-dxcdatabricks12-u7s3r2kwy2rag](#)

URL : [https://adb-4130658060493281.1.azuredatabricks.net](#)

Pricing Tier : standard

JSON View



Launch Workspace

Documentation

Getting Started

Import Data from File

Import Data from Azure Storage

Clusters / New Compute

New Cluster

Cancel

Create Cluster

DBU / hour: 2.25 - 6.75

2-8 Workers: 28-112 GB Memory, 8-32 Cores
1 Driver: 14 GB Memory, 4 Cores

Cluster name

dxcluster1

UI | JSON

Cluster mode

Standard

Databricks runtime version

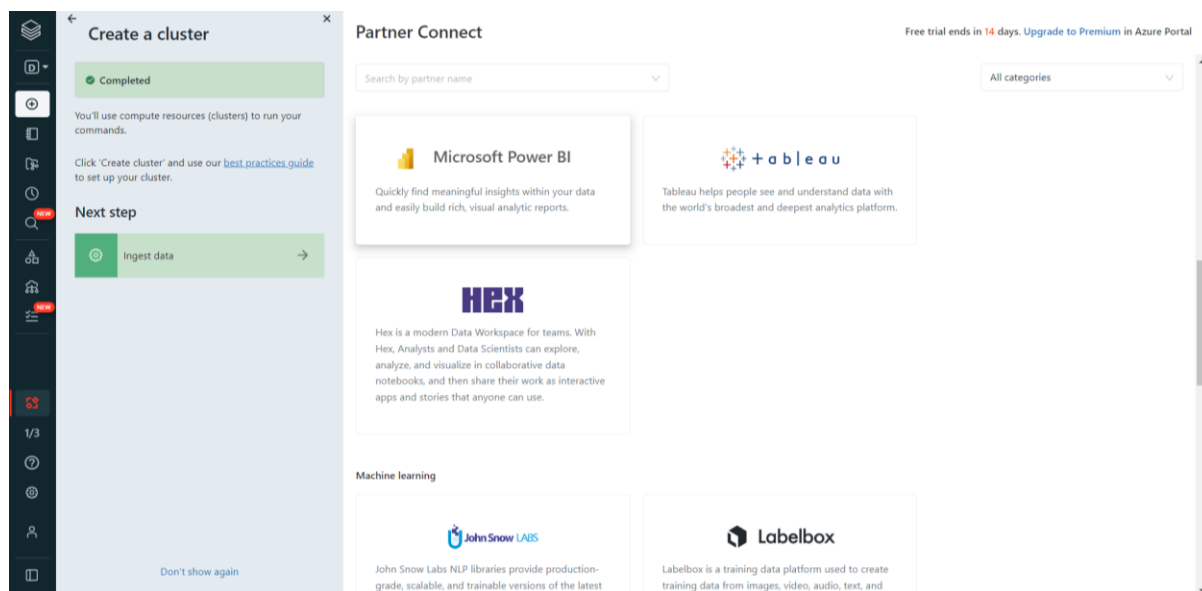
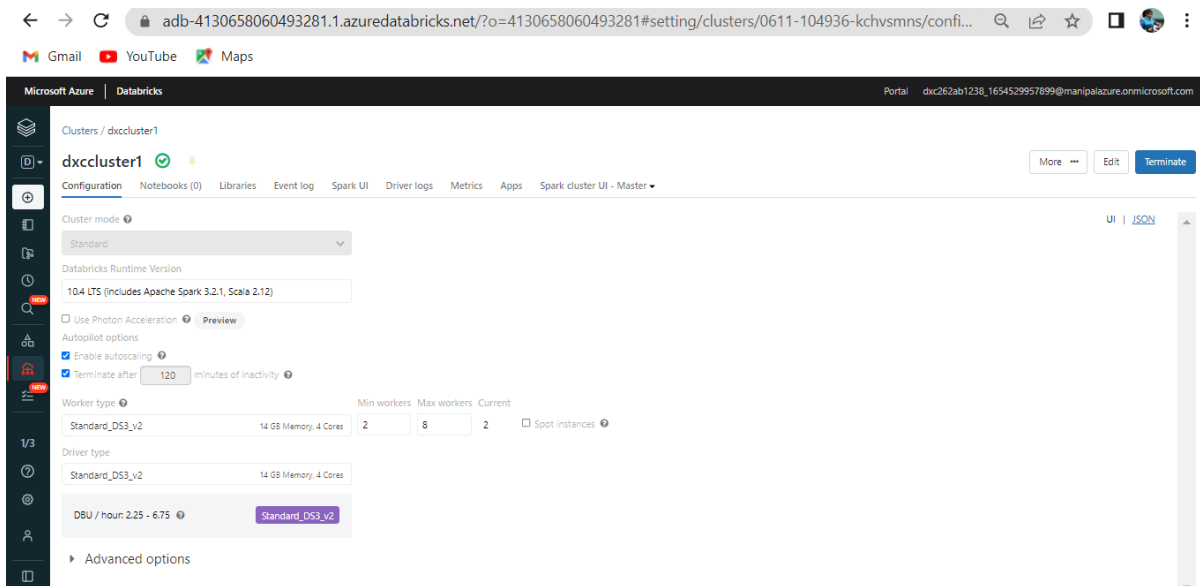
Runtime: 10.4 LTS (Scala 2.12, Spark 3.2.1)

Promotional discount applied to Photon during preview

☐ Use Photon Acceleration

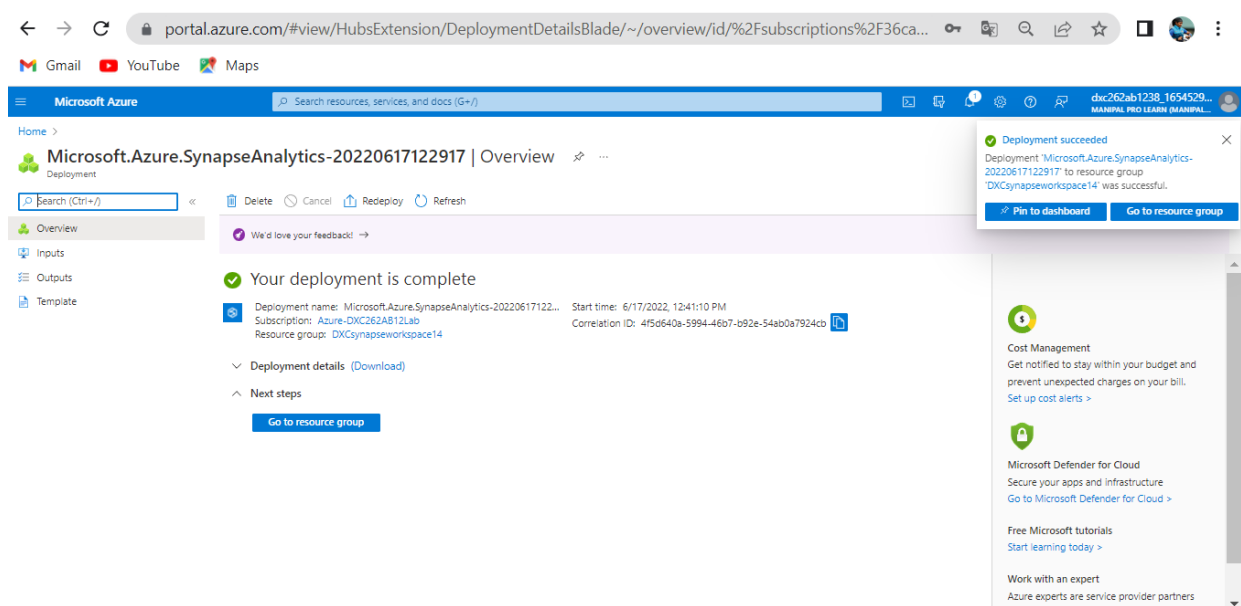
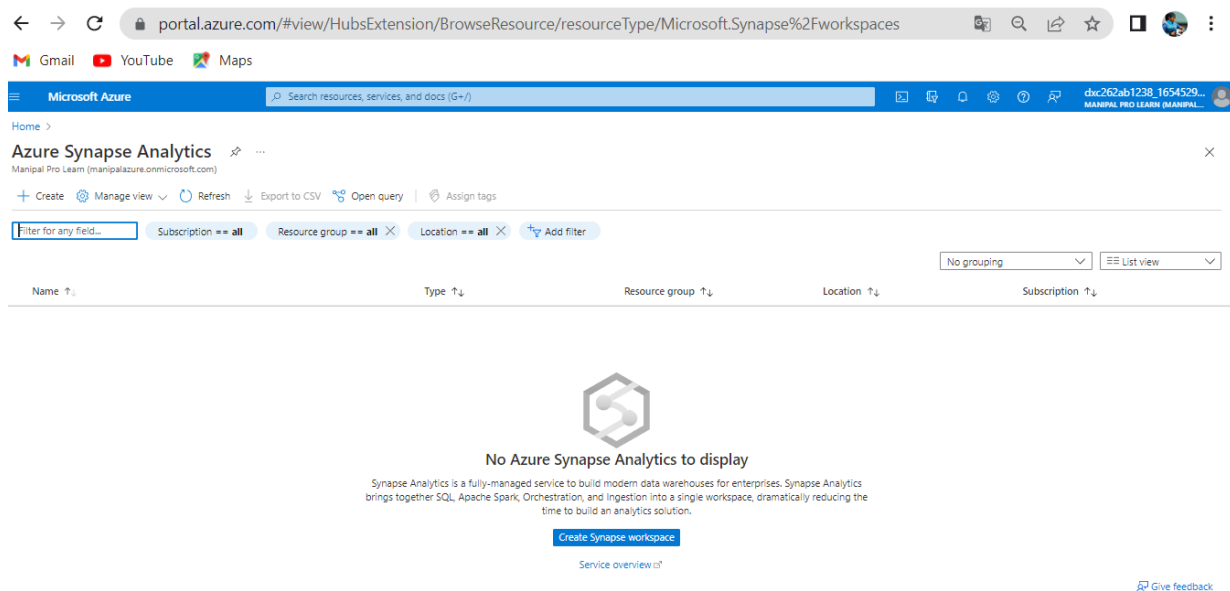
Preview

Autopilot options



- ✓ Download the connection file and then use it. We need to generate and access token. For that, click on User settings and generate an access token.
- ✓ Copy the token code and save it for future use.
- ✓ Open the connection file and login using the access token. Now, you can load the data and perform analytics on it. We can plot and verify the data and present it in different format.

4. Create Azure Synapse & connect with Azure Blob, explain the steps with screenshots



portal.azure.com/#@manipalazure.onmicrosoft.com/resource/subscriptions/36cae3b3-533b-4658-a187-08...

Microsoft Azure

Home > Microsoft.Azure.SynapseAnalytics-20220617122917 >

DXCsynapseworkspace14

Resource group

Search (Ctrl+/)

+ Create Manage view Delete resource group Refresh Export to CSV Open query Assign tags Move Delete Export template Open in mobile

Overview

Activity log

Access control (IAM)

Tags

Resource visualizer

Events

Settings

Deployments

Security

Policies

Properties

Locks

Cost Management

Cost analysis

Cost alerts (preview)

Budgets

Essentials

Subscription (move): [Azure-DXC262AB12Lab](#)

Subscription ID: 36cae3b3-533b-4658-a187-08120bcd8e4

Location: East US

Deployments: [1 Succeeded](#)

Tags (edit): [Click here to add tags](#)

Resources Recommendations

Filter for any field... Type == all Location == all Add filter

Showing 1 to 2 of 2 records. Show hidden types

Name	Type	Location
dxcsynapseworkspace14	Storage account	East US
dxcsynapseworkspace14	Synapse workspace	East US

< Previous Page 1 of 1 Next >

Give feedback

portal.azure.com/#@manipalazure.onmicrosoft.com/resource/subscriptions/36cae3b3-533b-4658-a187-08...

Microsoft Azure

Home > Microsoft.Azure.SynapseAnalytics-20220617122917 > DXCsynapseworkspace14 >

dxcsynapseworkspace14

Synapse workspace

Search (Ctrl+/)

+ New dedicated SQL pool + New Apache Spark pool + New Data Explorer pool (preview) Refresh Reset SQL admin password Delete

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Settings

Azure Active Directory

Properties

Locks

Analytics pools

SQL pools

Apache Spark pools

Data Explorer pools (preview)

Security

Encryption

Essentials

Resource group (move): [DXCsynapseworkspace14](#)

Status: Succeeded

Location: East US

Subscription (move): [Azure-DXC262AB12Lab](#)

Subscription ID: 36cae3b3-533b-4658-a187-08120bcd8e4

Managed virtual network: No

Managed Identity object: 97d54329-0c77-4f24-bc21-467061643e2e

Workspace web URL: <https://web.azure.synapse.net/worksapce=%2fsubscriptions%2f36cae3b3-533b-4658-a187-08120bcd8e4>

Tags (edit): [Click here to add tags](#)

Networking: [Show firewall settings](#)

Primary ADLS Gen2 account: <https://dxcsynapseworkspace14.dfs.core.windows.net>

Primary ADLS Gen2 file share: dxcsynapseworkspace1406

SQL admin username: sqladminuser

SQL Active Directory admin: dxcsynapseworkspace14@manipalazure.onmicrosoft.com

Dedicated SQL endpoint: dxcsynapseworkspace14.sql.azuresynapse.net

Serverless SQL endpoint: dxcsynapseworkspace14-ondemand.sql.azuresynapse.net

Development endpoint: <https://dxcsynapseworkspace14.dev.azuresynapse.net>

Getting started

Open Synapse Studio

Start building your fully-integrated analytics solution and unlock new insights.

Open it

Read documentation

Learn how to be productive quickly. Explore concepts, tutorials, and samples.

Learn more

Analytics pools

← → ↻ web.azure.synapse.net/en/authoring/explore/linked?workspace=%2Fsubscriptions%2F36cae3b3-533b-4658-a18... Gmail YouTube Maps

Microsoft Azure | Synapse Analytics | dxcynapseworkspace1 Search dxc262ab1238_1654529957899@manipalazure.onmicrosoft.com MANIPAL PRO LEARN

Gallery

Database templates Datasets Notebooks SQL scripts Pipelines

Filter by keyword Tags: All

US Consumer Price Index

The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and ser...

ID: us-consumer-price-index

US Labor Force Statistics

US Labor Force Statistics provides Labor Force Statistics, labor force participation rates, and the civilian noninstitutional population by age, gender, race, and ethnic groups. in...

ID: us-labor-force-statistics

US Local Area Unemployment Statistics

The US Local Area Unemployment Statistics datasets provides monthly and annual employment, unemployment, and labor force da...

ID: us-local-area-unemployment-s...

US Employment Hours and Earnings

The Current Employment Statistics (CES) program produces detailed industry estimates of nonfarm employment, hours, and earnings ...

ID: us-employment-hours-earning...

US Population by County and Earnings

US population by gender and race for each US county sourced from 2000 and 2010 Decennial Census. This dataset is sourced from the United States Census Bureau.

ID: us-decennial-census-county

US Population by ZIP Code

US population by gender and race for each US ZIP code sourced from 2010 Decennial Census. This dataset is sourced from the United States Census Bureau.

US Producer Price Index - Commodities

The Producer Price Index (PPI) is a measure of average change over time in the selling prices received by domestic producers for their co...

US Producer Price Index - Industry

The Producer Price Index (PPI) is a measure of average change over time in the selling prices received by domestic producers for their ou...

US State Employment Hours and Earnings

The Current Employment Statistics (CES) program produces detailed industry estimates of nonfarm employment, hours, and earnings ...

Continue Close

← → ↻ web.azure.synapse.net/en/authoring/explore/linked/notebooks/Notebook%203?subFolderPath=&workspace=%... Gmail YouTube Maps

Microsoft Azure | dxcynapseworkspace14 Search dxc262ab1238_1654529957899@manipalazure.onmicrosoft.com MANIPAL PRO LEARN

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Synapse live Validate all Publish all

Data

Workspace Linked

Filter resources by name

- Azure Blob Storage 2
 - AzureBlobStorage1 (dxcynapsewo...
 - dxcynapseworkspace1406
 - sourceblob1
- Sample Datasets
 - us-producer-price-index-industry
- Azure Data Lake Storage Gen2 2

sourceblob1 Notebook 3

Run all Undo Publish Outline Attach to

Session timed out. Run the notebook to start a new session.

4	2009
3	2009
4	2009
5	2009
6	2009
7	2009
8	2009
9	2009

Connect to external data

Once a connection is created, the underlying data of that connection will be available for analysis in the Data hub or for pipeline activities in the Integrate hub.

Azure Blob Storage

Azure Cosmos DB (MongoDB API)

Azure Cosmos DB (SQL API)

Azure Data Explorer (Kusto)

Azure Data Lake Storage Gen2

Continue Cancel

The screenshot shows the Microsoft Azure Synapse Analytics interface. The left sidebar contains navigation options: Home, Data, Develop, Integrate, Monitor, and Manage. The main area is titled 'Data' and shows a list of linked resources under 'Workspace'. The 'sourceblob1' resource is selected, and a table of files is displayed.

Name	Access Tier	Access Tier Last Modified	Last Modified	Blob Type	Content Type	Size	Status	Remc
circuits.csv	Hot		6/17/2022, 1:07:54 PM	Block Blob	text/csv	9.1 KB	Active	
constructors.json	Hot		6/17/2022, 1:06:28 PM	Block Blob	application/json	29.7 KB	Active	
pit_stops.json	Hot		6/17/2022, 1:07:02 PM	Block Blob	application/json	1.3 MB	Active	
racers.csv	Hot		6/17/2022, 1:07:26 PM	Block Blob	text/csv	114.1 KB	Active	

Showing 1 to 4 of 4 cached items

5. Create Azure Synapse spark pool & query sample sample JSON file, explain the steps with screenshots

The screenshot shows the Microsoft Azure Synapse Analytics interface. The left sidebar contains navigation options: Home, Data, Develop, Integrate, Monitor, and Manage. The main area is titled 'Data' and shows a list of linked resources under 'Workspace'. The 'sourceblob1' resource is selected, and a table of files is displayed. A 'New Spark table' button is highlighted in the 'Load to DataFrame' dropdown menu.

Name	Access Tier	Access Tier Last Modified	Last Modified	Blob Type	Content Type	Size	Status	Remaining Days	Deleted Time
circuits.csv	Hot		6/17/2022, 1:07:54 PM	Block Blob	text/csv	9.1 KB	Active		
constructors.json	Hot		6/17/2022, 1:06:28 PM	Block Blob	application/json	29.7 KB	Active		
pit_stops.json	Hot		6/17/2022, 1:07:02 PM	Block Blob	application/json	1.3 MB	Active		
racers.csv	Hot		6/17/2022, 1:07:26 PM	Block Blob	text/csv	114.1 KB	Active		

Showing 1 to 4 of 4 cached items

← → ↻ web.azure.synapse.net/en/management/apachesparkpools?subFolderPath=&workspace=%2Fsubscriptions%2F3... Gmail YouTube Maps

Microsoft Azure | dxcsynapseworkspace14

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New Apache Spark pool

Create an Synapse Analytics Apache Spark pool with your preferred configurations. Complete the Basics tab then go to Review + Create to provision with smart defaults, or visit each tab to customize.

Apache Spark pool details

Name your Apache Spark pool and choose its initial settings.

Apache Spark pool name *

Isolated compute * ☐ Enabled ☒ Disabled

Node size family *

Node size *

Autoscale * ☒ Enabled ☐ Disabled

Number of nodes *

Estimated price

Dynamically allocate executors * ☐ Enabled ☒ Disabled

[Review + create](#) [Next: Additional settings >](#) [Cancel](#)

← → ↻ web.azure.synapse.net/en/management/apachesparkpools?subFolderPath=&workspace=%2Fsubscriptions%2F3... Gmail YouTube Maps

Microsoft Azure | dxcsynapseworkspace14

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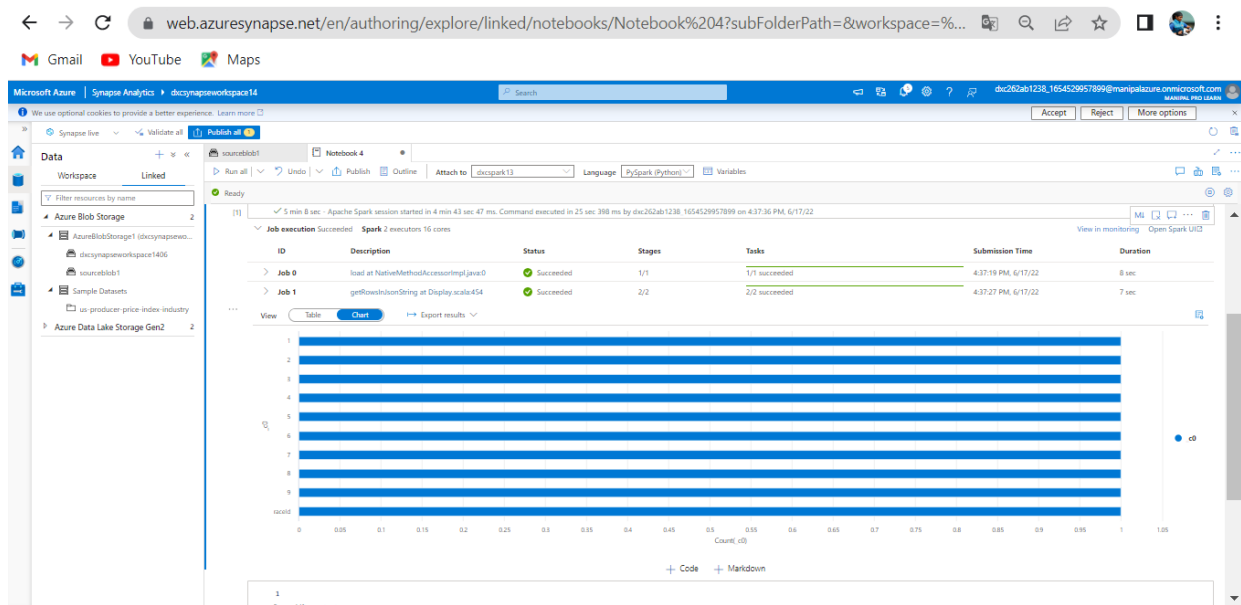
Apache Spark pool

Apache Spark pools can be tuned to run different kinds of Apache Spark workloads using specific configuration libraries, permissions, etc. [Learn more](#)

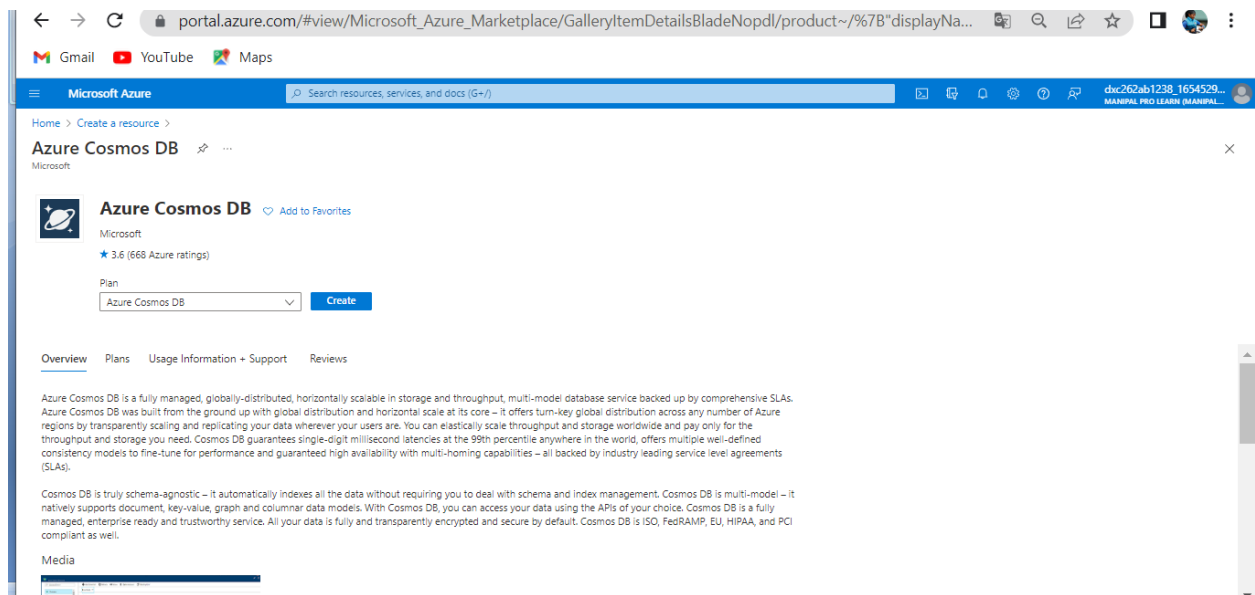
[+ New](#) [Refresh](#)

Showing 1-1 of 1 item

Name	Node size family	Size
dxcspark13	Memory Optimized	Medium (8 vCores / 64 GB) - 3 to 3 nodes



6. Create Azure Cosmos DB & import sample JSON file, explain the steps with screenshots



portal.azure.com/#create/Microsoft.DocumentDB

Microsoft Azure

Home > Create a resource > Azure Cosmos DB >

Select API option

Which API best suits your workload?

Azure Cosmos DB is a fully managed NoSQL database service for building scalable, high performance applications. [Learn more](#)

To start, select the API to create a new account. The API selection cannot be changed after account creation.

Core (SQL) - Recommended

Azure Cosmos DB's core, or native API for working with documents. Supports fast, flexible development with familiar SQL query language and client libraries for .NET, JavaScript, Python, and Java.

[Create](#) [Learn more](#)

Azure Cosmos DB API for MongoDB

Fully managed database service for apps written for MongoDB. Recommended if you have existing MongoDB workloads that you plan to migrate to Azure Cosmos DB.

[Create](#) [Learn more](#)

Cassandra

Fully managed Cassandra database service for apps written for Apache Cassandra. Recommended if you have existing Cassandra workloads that you plan to migrate to Azure Cosmos DB.

[Create](#) [Learn more](#)

Azure Table

Fully managed database service for apps written for Azure Table storage. Recommended if you have existing Azure Table storage workloads that you plan to migrate to Azure Cosmos DB, but do not want to re-write your application to use the SQL API.

[Create](#) [Learn more](#)

Gremlin (Graph)

Fully managed graph database service using the Gremlin query language, based on Apache TinkerPop project. Recommended for new workloads that need to store relationships between data.

[Create](#) [Learn more](#)

portal.azure.com/#create/Microsoft.DocumentDB

Microsoft Azure

Home > Create a resource > Azure Cosmos DB > Select API option >

Create Azure Cosmos DB Account - Core (SQL)

Basics Global Distribution Networking Backup Policy Encryption Tags Review + create

Azure Cosmos DB is a fully managed NoSQL database service for building scalable, high performance applications. [Try it for free](#), for 30 days with unlimited renewals. Go to production starting at \$24/month per database, multiple containers included. [Learn more](#)

Project Details

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

Subscription * Azure-DXC262AB12Lab

Resource Group * (New) dxccosmosdb1 [Create new](#)

Instance Details

Account Name * dxccosmosdb1

Location * (US) East US

Capacity mode ☐ Provisioned throughput ☒ Serverless [Learn more about capacity mode](#)

[Review + create](#) [Previous](#) [Next: Global Distribution](#)

portal.azure.com/#create/Microsoft.DocumentDB

Microsoft Azure

Home > Create a resource > Azure Cosmos DB > Select API option >

Create Azure Cosmos DB Account - Core (SQL)

Validation Success

Basics Global Distribution Networking Backup Policy Encryption Tags **Review + create**

Creation Time

Estimated Account Creation Time (in minutes) 2

The estimated creation time is calculated based on the location you have selected

Basics

Subscription	Azure-DXC262AB12Lab
Resource Group	(new) dxccosmosdb1
Location	East US
Account Name	(new) dxccosmosdb1
API	Core (SQL)
Capacity mode	Serverless
Availability Zones	Disable

Create Previous Next Download a template for automation

portal.azure.com/#view/HubsExtension/DeploymentDetailsBlade/~/overview/id/%2Fsubscriptions%2F36cae3b3...

Microsoft Azure

Home >

Microsoft.Azure.CosmosDB-20220617170646 | Overview

Deployment

Search (Ctrl+/)

Delete Cancel Redeploy Refresh

We'd love your feedback! →

Your deployment is complete

Deployment name: Microsoft.Azure.CosmosDB-20220617170646 Start time: 6/17/2022, 5:06:57 PM
Subscription: Azure-DXC262AB12Lab Correlation ID: 30de6cf1-74bc-4622-a503-a1d558cf96c
Resource group: dxccosmosdb1

Deployment details (Download)

Next steps

Go to resource

Deployment succeeded

Deployment 'Microsoft.Azure.CosmosDB-20220617170646' to resource group 'dxccosmosdb1' was successful.

Go to resource Pin to dashboard

Cost Management

Get notified to stay within your budget and prevent unexpected charges on your bill.

Set up cost alerts >

Microsoft Defender for Cloud

Secure your apps and infrastructure

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Work with an expert

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Microsoft Azure

Search resources, services, and docs (G+)

Home > Microsoft Azure Cosmos DB-20220617170646 > dxccosmosdb1

dxccosmosdb1 | Data Explorer

Azure Cosmos DB account

Search (Ctrl+/)

Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Quick start, Notifications, Data Explorer, Settings, Features, Default consistency, Backup & Restore, Firewall and virtual networks, Private Endpoint Connections, CORS, Dedicated Gateway

SQL API

DATA

source1

Items

Settings

Stored Procedures

User Defined Functions

Triggers

ToDoList

Items

NOTEBOOKS

Notebooks is currently not available. We are working on it.

SELECT * FROM c

id /movieid

1 2 3

"id": "replace_with_new_document_id"

portal.azure.com/#@manipalazure.onmicrosoft.com/resource/subscriptions/36cae3b3-533b-4658-a187-08120b...

Microsoft Azure

Search resources, services, and docs (G+)

Home > Microsoft Azure Cosmos DB-20220617170646 > dxccosmosdb1

dxccosmosdb1 | Data Explorer

Azure Cosmos DB account

Search (Ctrl+/)

New Container, Enable Azure Synapse Link, New Notebook, Connect to GitHub

Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Quick start, Notifications, Data Explorer, Settings, Features, Default consistency, Backup & Restore, Firewall and virtual networks, Private Endpoint Connections, CORS, Dedicated Gateway

SQL API

DATA

ToDoList

Items

NOTEBOOKS

Notebooks is currently not available. We are working on it.

Welcome to Cosmos

Globally distributed, multi-model database service

Launch quick start

New Container

Create a new container for storage and throughput

Recents

Top 3 things you need to know

Advanced Modeling Patterns

New Container

Database id

Create new Use existing

source

Container id

source1

Partition key

/movieid

Unique keys

Add unique key

Analytical store

On Off

Azure Synapse Link is required for creating an analytical store container. Enable Synapse Link for this Cosmos DB account. Learn

portal.azure.com/#@manipalazure.onmicrosoft.com/resource/subscriptions/36cae3b3-533b-4658-a187-08120b...

Microsoft Azure

Search resources, services, and docs (G+)

Home > Microsoft.Azure.CosmosDB-20220617170646 > dxccosmosdb1

dxccosmosdb1 | Data Explorer

Azure Cosmos DB account

Search (Ctrl+/)

SQL API

DATA

source1

Items

Settings

Stored Procedures

User Defined Functions

Triggers

ToDoList

Items

NOTEBOOKS

NOTEBOOKS is currently not available. We are working on it.

SELECT * FROM c

Edit Filter

id /movieid

Load more

```
1 {
2   "1": "ENDHERAN",
3   "2": "EDHIRNEECHAL",
4   "3": "ANNIVAN",
5   "4": "MERSAL",
6   "5": "VEEVEGAM",
7 }
8
```

portal.azure.com/#@manipalazure.onmicrosoft.com/resource/subscriptions/36cae3b3-533b-4658-a187-08120b...

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2   "1": "ENDHERAN",
3   "2": "EDHIRNEECHAL",
4   "3": "ANNIVAN",
5   "4": "MERSAL",
6   "5": "VEEVEGAM",
7   "10": "1b96d793-8a06-4c3e-bbc3-7fc07c3b4ba6",
8   "_id": "FONGA3j-xw8AAAAAAAAA==",
9   "_self": "dbs/FONGA3j-colls/FONGA3j-xw8/docs/FONGA3j-xw8AAAAAAAAA==/",
10  "_etag": "\"1b96d793-8a06-4c3e-bbc3-7fc07c3b4ba6\"",
11  "_attachments": "attachments/",
12  "_ts": 1655466269
13 }
```

portal.azure.com/#@manipalazure.onmicrosoft.com/resource/subscriptions/36cae3b3-533b-4658-a187-08120b...

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DATA

source1

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SELECT * FROM c

Id

1095c793...

d9a661bd...

c56fe976...

5bc3c44...

aa03fc83...

d29993de...

d4544a9f...

d000b6fa...

495df7d4...

12e50ebd...

164dc141...

Load more

Upload Items

Select JSON Files

pit_stops.json

Upload

portal.azure.com/#@manipalazure.onmicrosoft.com/resource/subscriptions/36cae3b3-533b-4658-a187-08120b...

Microsoft Azure

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dxccosmosdb1 | Data Explorer

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source1

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NOTEBOOKS

Notebooks is currently not available. We are working on it.

Query 1

1 SELECT * FROM c

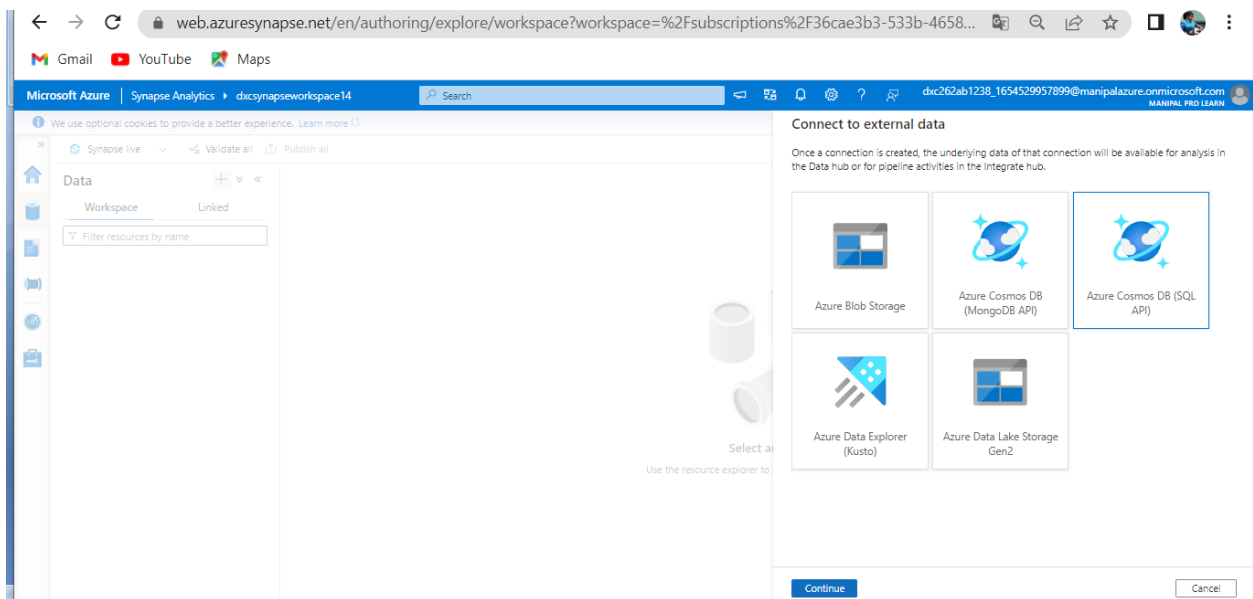
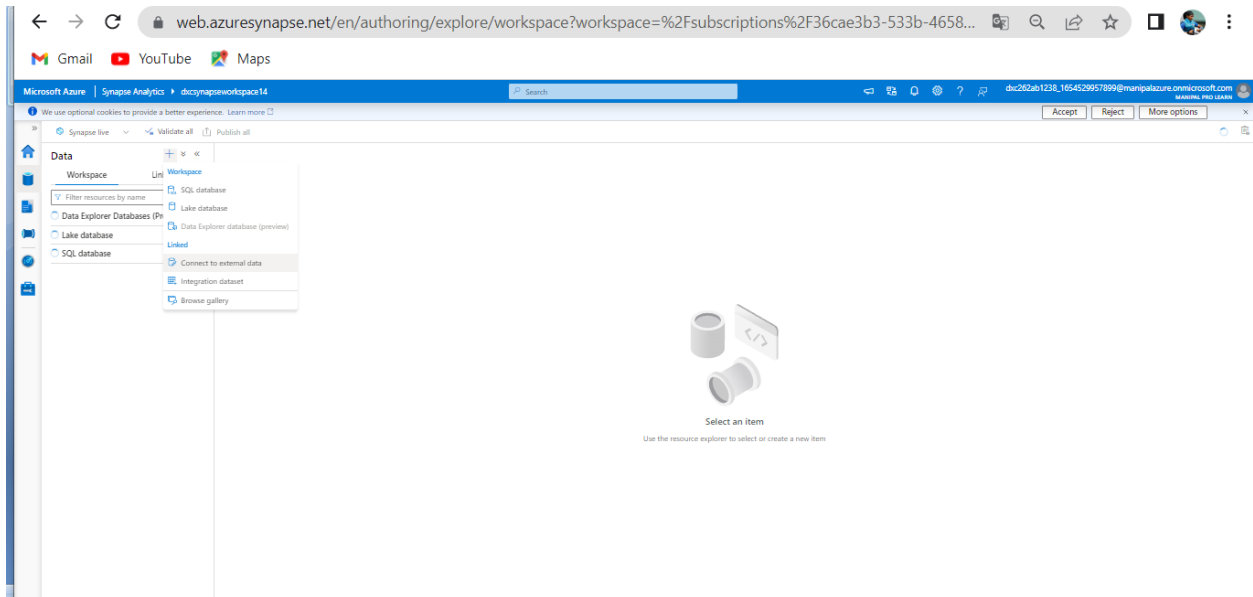
Results

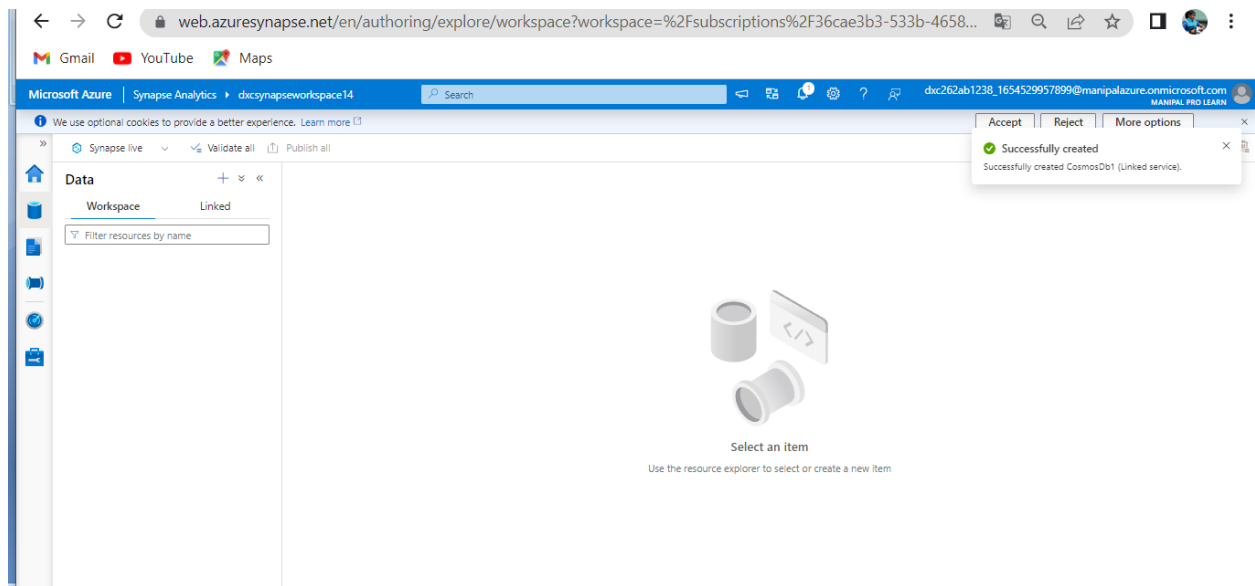
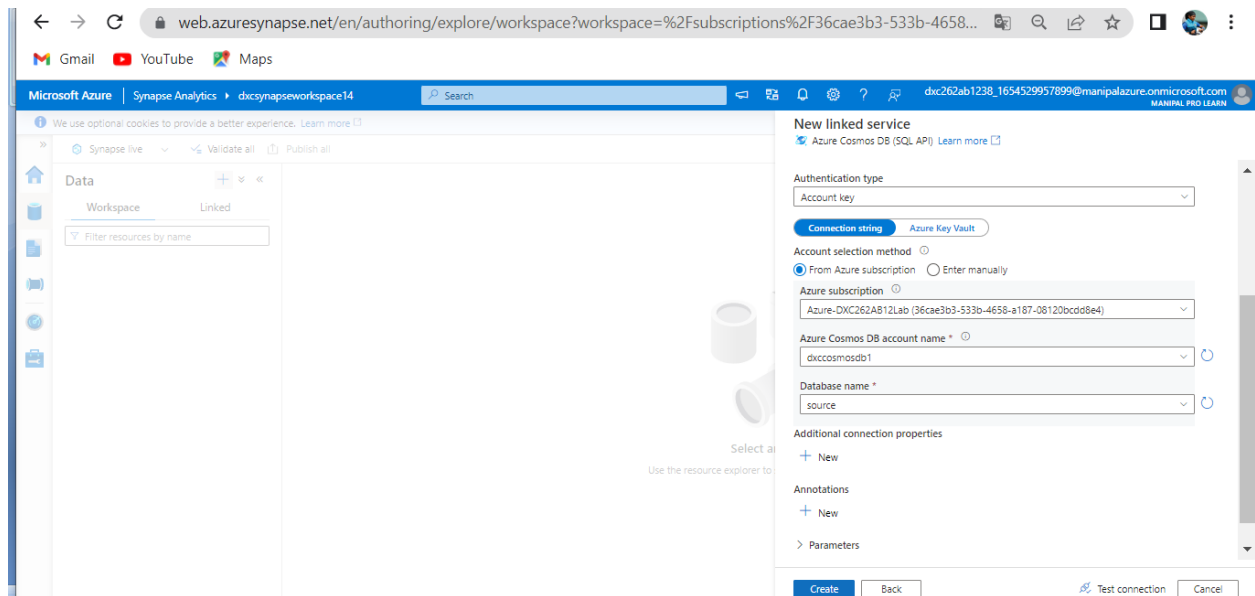
Query Stats

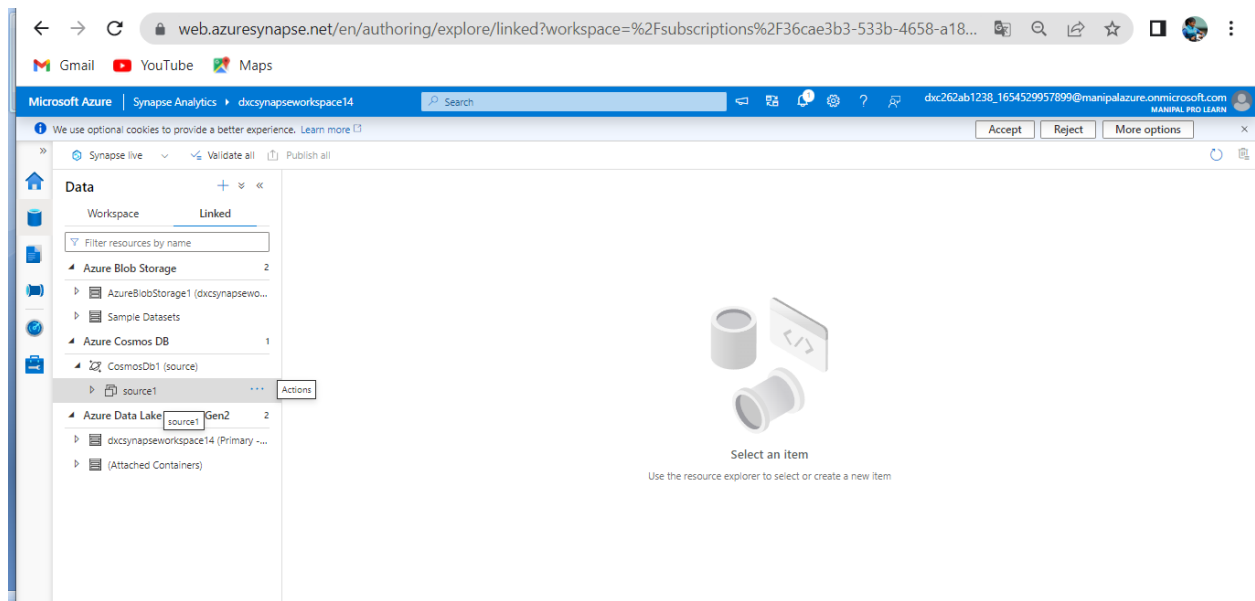
101 - 200 | Load more

```
{
  "raceId": 842,
  "driverId": 17,
  "stop": 4,
  "lap": 43,
  "time": "17:19:10",
  "duration": 22.161,
  "milliseconds": 22161,
  "id": "52688458-a778-4b6b-a1f7-e73a1452503d",
  "_rid": "F0NGA3j-xx1AAAAAAAAA==",
  "_self": "dbs/F0NGA3j-coll1/F0NGA3j-xx1AAAAAAAAA==/",
  "_etag": "\"17080c376-0000-0100-0000-62ac04800000\"",
  "_attachments": "attachments/"
}
```

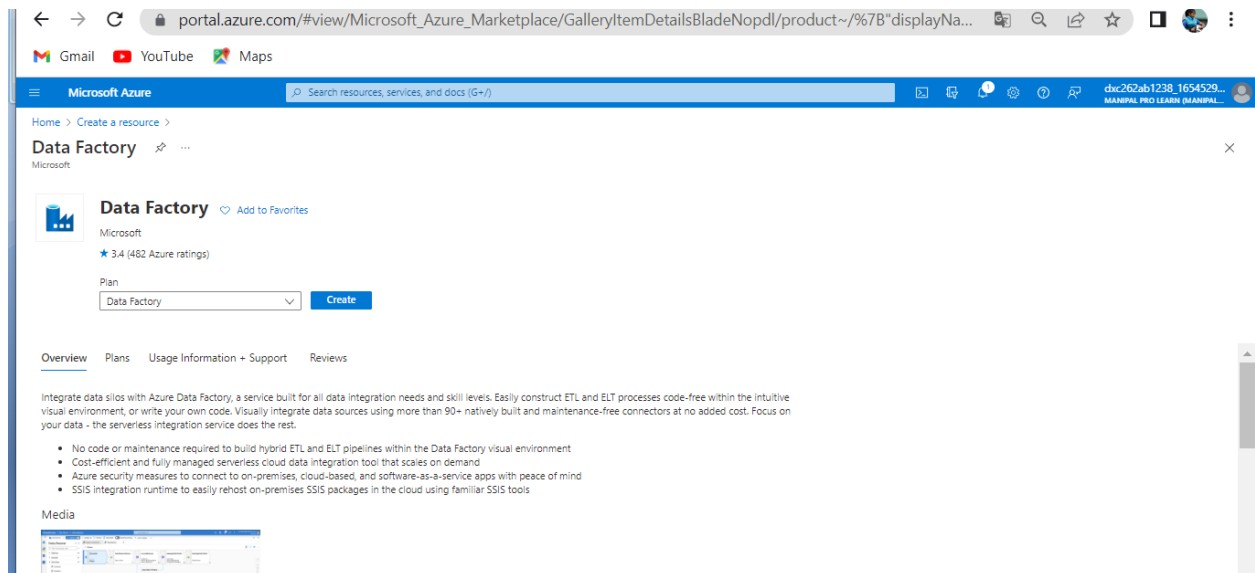
7. Connect COSMOS DB & Azure Synapse analytics & explain the steps with screenshots

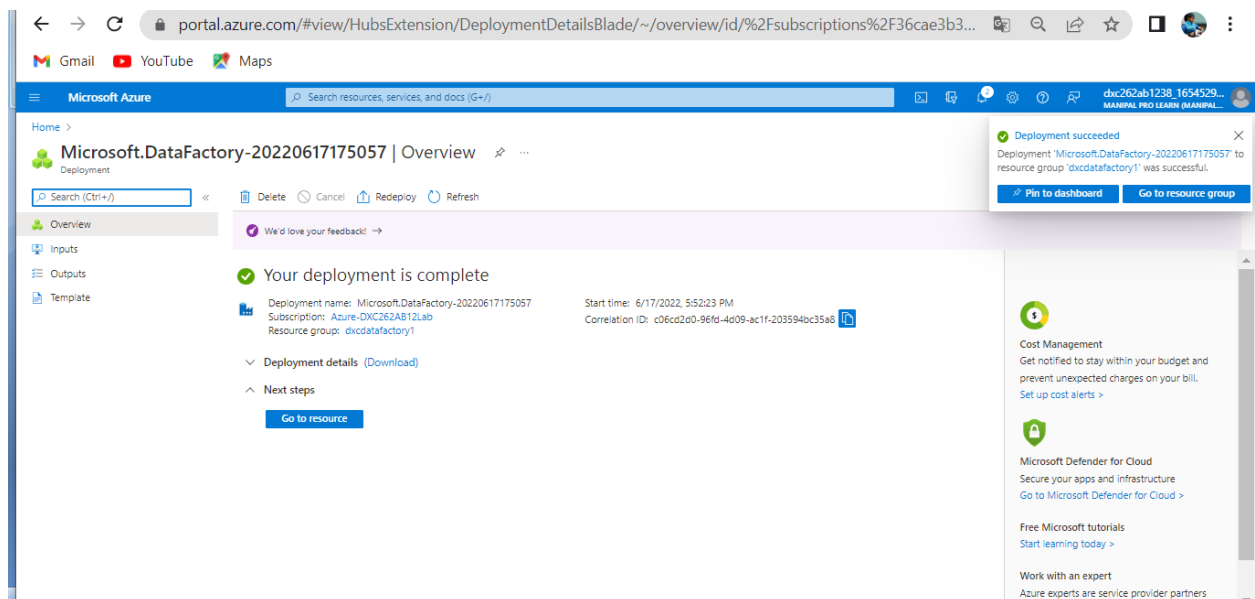
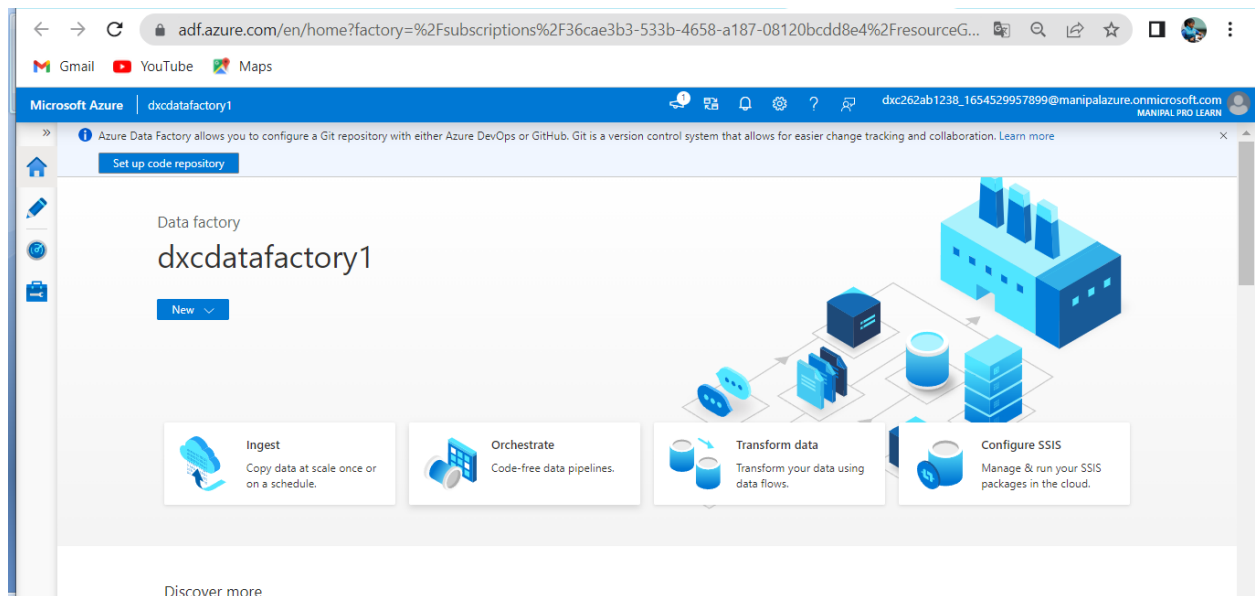






8. Create azure Data factory & azure Blob, connect Blob & ADF, import blob files into Data factory & explain the steps with screenshots





portal.azure.com/#create/Microsoft.StorageAccount

Microsoft Azure

Home > Storage accounts >

Create a storage account

Validation passed

Basics Advanced Networking Data protection Encryption Tags **Review + create**

Basics

Subscription	Azure-DXC262AB12Lab
Resource Group	dxstorage1
Location	eastus
Storage account name	dxstorage12
Deployment model	Resource manager
Performance	Standard
Replication	Read-access geo-redundant storage (RA-GRS)

Advanced

Secure transfer	Enabled
Allow storage account key access	Enabled
Allow cross-tenant replication	Enabled

Create < Previous Next > Download a template for automation

portal.azure.com/#view/HubsExtension/DeploymentDetailsBlade/~/overview/id/%2Fsubscriptions%2F36cae3b3...

Microsoft Azure

Home >

dxstorage12_1655468786329 | Overview

Deployment

Search (Ctrl+F) Delete Cancel Redeploy Refresh

We'd love your feedback! →

✓ Your deployment is complete

Deployment name: dxstorage12_1655468786329
Subscription: Azure-DXC262AB12Lab
Resource group: dxstorage1

Start time: 6/17/2022, 5:56:40 PM
Correlation ID: 33c9a88c-ee64-4fec-9127-affcb63afa88

Deployment details (Download)
Next steps
[Go to resource](#)

Deployment succeeded
Deployment 'dxstorage12_1655468786329' to resource group 'dxstorage1' was successful.
[Go to resource](#) [Pin to dashboard](#)

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Work with an expert
Azure experts are service provider partners

portal.azure.com/#@manipalazure.onmicrosoft.com/resource/subscriptions/36cae3b3-533b-4658-a187-08120b...

Microsoft Azure

Home > dxcstorage12_1655468786329 > dxcstorage12

dxcstorage12 | Containers

Search (Ctrl+/)

+ Container Change access level Restore containers Refresh Delete

Search containers by prefix

Name	Last modified	Public access level
<input type="checkbox"/> \$logs	6/17/2022, 5:57:14 PM	Private
<input type="checkbox"/> source	6/17/2022, 5:57:53 PM	Blob

New container

Name *
source1

Public access level
Blob (anonymous read access for blobs only)

Blobs within the container can be read by anonymous request, but container data is not available. Anonymous clients cannot enumerate the blobs within the container.

Advanced

Create Discard

portal.azure.com/#view/Microsoft_Azure_Storage/ContainerMenuBlade/~/overview/storageAccountId/%2Fsubs...

Microsoft Azure

Home > dxcstorage12_1655468786329 > dxcstorage12 > source

source

Search (Ctrl+/)

Upload Change access level Refresh Delete Change tier Acquire lease Break lease View snapshots Create

Authentication method: Access key (Switch to Azure AD User Account)
Location: source

Search blobs by prefix (case-sensitive)

Add filter

Name	Modified	Access tier	Archive status	Blob type
<input type="checkbox"/> 1000_Companies.csv	6/17/2022, 5:58:21 PM	Hot (Inferred)		Block blob

Upload Completed for 1000_Companies.csv
50 KIB | dxcstorage12

Select a file

Overwrite if files already exist

Advanced

Upload

Current uploads

Dismiss: Completed All

1000_Companies.csv 50 KIB / 50 KIB

adf.azure.com/en/home/copywizard?factory=%2Fsubscriptions%2F36cae3b3-533b-4658-a187-08120bcdd8e4%...

Microsoft Azure | dxcdatfactory1

Copy Data tool

Use Copy Data Tool to perform a one-time or scheduled data load from 90+ data sources. Follow the wizard experience to specify your data loading settings, and let the Copy Data Tool generate the artifacts for you, including pipelines, datasets, and linked services. [Learn more](#)

Properties

Select copy data task type and configure task schedule

Task type

Built-in copy task
You will get single pipeline to copy data from 90+ data source easily.

Metadata-driven copy task
You will get parameterized pipelines which can read metadata from an external store to load data at a large scale.

You will get single pipeline to quickly copy objects from data source store to destination in a very intuitive manner.

Task cadence or task schedule *

☒ Run once now
 ☐ Schedule
 ☐ Tumbling window

< Previous Next > Cancel

adf.azure.com/en/home/copywizard?factory=%2Fsubscriptions%2F36cae3b3-533b-4658-a187-08120bcdd...

Microsoft Azure | dxcdatfactory1

Copy Data tool

Specify the source data store for the copy task. You can use an existing data store connection or create a new one.

Source data store

Source type: Azure Blob Storage

Connection *: Select... [+ New connection](#)

New linked service

[Azure Blob Storage](#) [Learn more](#)

Name *: AzureBlobStorage1

Description:

Connect via integration runtime *: AutoResolveIntegrationRuntime

Authentication type: Account key

[Connection string](#) [Azure Key Vault](#)

Account selection method: ☒ From Azure subscription ☐ Enter manually

Azure subscription: Select all

Storage account name *:

Create Cancel [Test connection](#)

- ✓ By giving the above details we can connect blob storage to data factory.
- ✓ Then by creating pipeline we can import datas in blob storage to data factory.