

Advanced Database Management system Project 4 (Food Management System)

Team 1 (Cosmos DB)

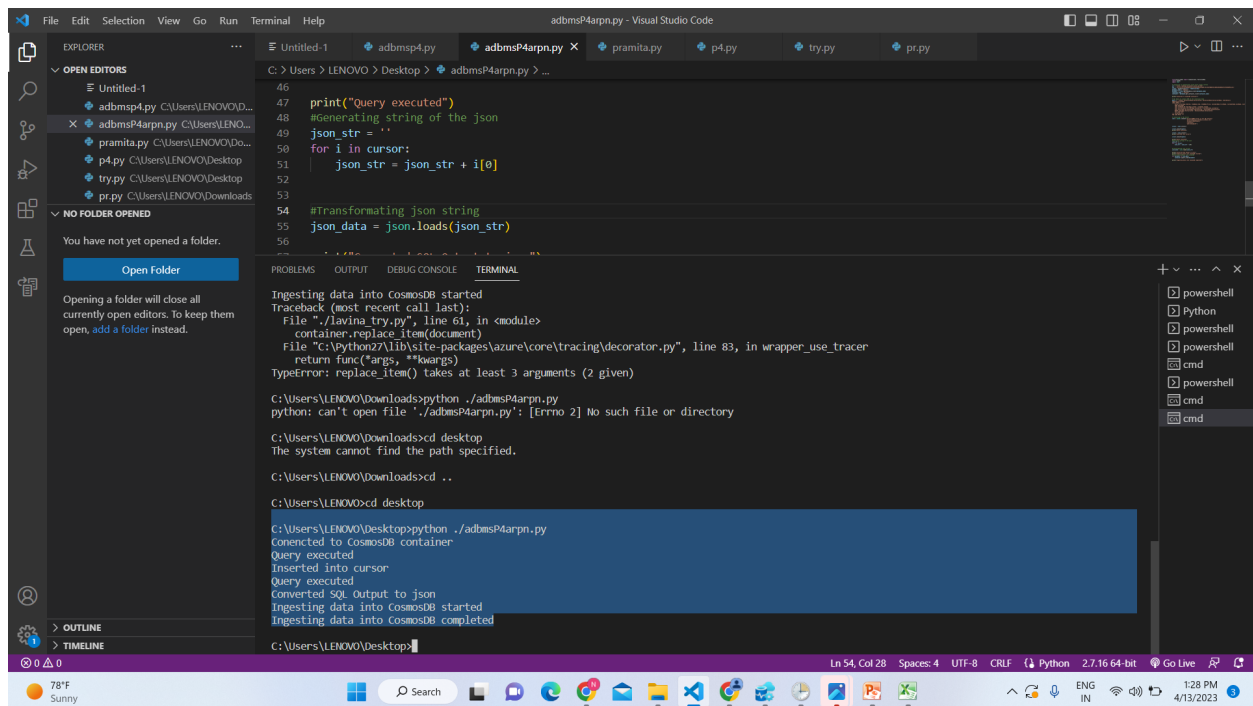
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Python Script to insert data:



The screenshot displays the Visual Studio Code interface with a Python script named `adbmsP4arpn.py` open in the editor. The script is designed to connect to a CosmosDB container and insert data. The terminal window shows the execution of the script, which includes a traceback error message and a successful execution output.

```
46
47 print("Query executed")
48 #generating string of the json
49 json_str = ''
50 for i in cursor:
51     json_str = json_str + i[0]
52
53
54 #transforming json string
55 json_data = json.loads(json_str)
56
```

Terminal Output:

```
Ingesting data into CosmosDB started
Traceback (most recent call last):
  File ".\lavina_try.py", line 61, in <module>
    container.replace_item(document)
  File "C:\Python27\Lib\site-packages\azure\core\tracing\decorator.py", line 83, in wrapper_use_tracer
    return func(*args, **kwargs)
TypeError: replace_item() takes at least 3 arguments (2 given)

C:\Users\LENOVO\Downloads>python ./adbmsP4arpn.py
python: can't open file './adbmsP4arpn.py': [Errno 2] No such file or directory

C:\Users\LENOVO\Downloads>cd desktop
The system cannot find the path specified.

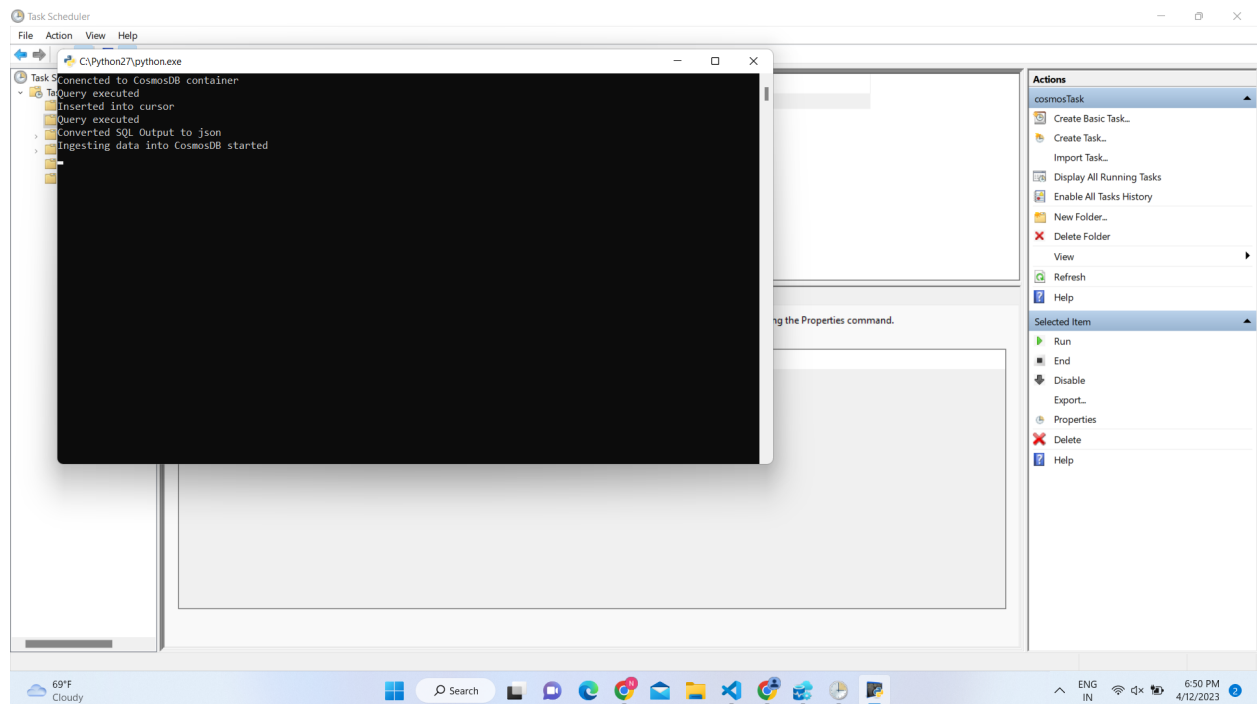
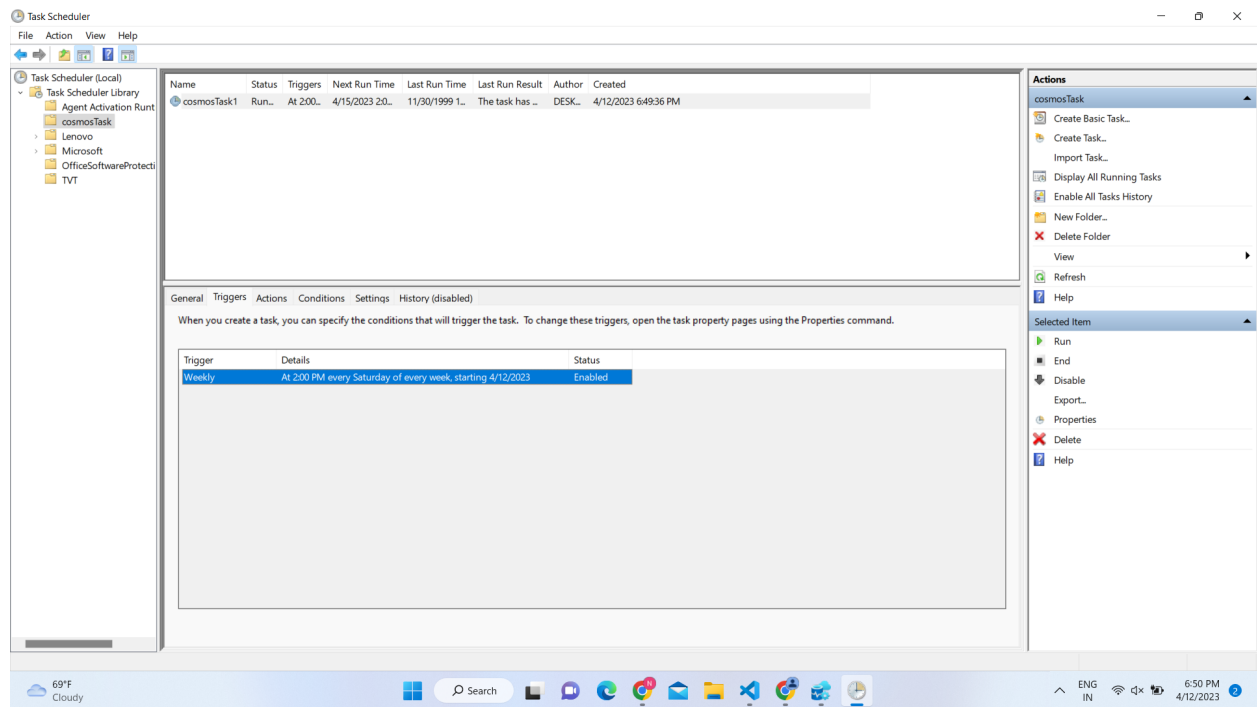
C:\Users\LENOVO\Downloads>cd ..

C:\Users\LENOVO>cd desktop

C:\Users\LENOVO\Desktop>python ./adbmsP4arpn.py
Connected to CosmosDB container
Query executed
Inserted into cursor
Query executed
Converted SQL Output to json
Ingesting data into CosmosDB started
Ingesting data into CosmosDB completed

C:\Users\LENOVO\Desktop>
```

Auto Refresh Python Script using Task Scheduler:



Inserted data using python script:

Microsoft Azure portal screenshot showing the Data Explorer interface for the 'adbmsp4' Azure Cosmos DB account. The left sidebar lists various services and settings. The main pane displays the 'pramita' database structure, including 'Items', 'Settings', 'Stored Procedures', 'User Defined Functions', 'Triggers', and 'Conflicts'. The 'Items' collection is selected, showing a list of documents. The 'Query 1' tab is active, displaying a SQL query: `SELECT * FROM c`. The 'Results' pane shows a single document with the following JSON structure:

```
{
  "RestaurantId": 1,
  "RestaurantName": "Cardify",
  "OrderDetails": [
    {
      "OrderId": 24,
      "firstName": "Kendall",
      "lastName": "Stops",
      "Price": 3,
      "Item": "Tandoori Chicken",
      "contactNumber": "630-238-9909",
      "OrderStatus": "Pending",
      "address": "Illinois, IL 60567, USA",
      "email": "kstopps@vk.com"
    }
  ]
}
```

The bottom status bar indicates the temperature is 69°F and the weather is Cloudy.

Updated data after auto refresh using scheduler: check: price and orderstatus after update

Microsoft Azure portal screenshot showing the Data Explorer interface for the 'adbmsp4' Azure Cosmos DB account. The left sidebar lists various services and settings. The main pane displays the 'pramita' database structure, including 'Items', 'Settings', 'Stored Procedures', 'User Defined Functions', 'Triggers', and 'Conflicts'. The 'Items' collection is selected, showing a list of documents. The 'Query 1' tab is active, displaying a SQL query: `SELECT * FROM c`. The 'Results' pane shows a single document with the following JSON structure:

```
{
  "RestaurantId": 1,
  "RestaurantName": "Cardify",
  "OrderDetails": [
    {
      "OrderId": 24,
      "firstName": "Kendall",
      "lastName": "Stops",
      "Price": 25,
      "Item": "Tandoori Chicken",
      "contactNumber": "630-238-9909",
      "OrderStatus": "Confirmed",
      "address": "Illinois, IL 60567, USA",
      "email": "kstopps@vk.com"
    }
  ]
}
```

The bottom status bar indicates the temperature is 78°F and the weather is Sunny.

Azure data Factory:

The screenshot displays the Microsoft Azure Data Factory interface. The left sidebar shows the 'Factory Resources' tree with categories like Pipelines, Datasets, and Data flows. The main canvas shows a pipeline named 'pipeline_cust' with a single activity named 'DATAFLOW_cust'. The 'Properties' pane on the right shows the 'General' tab with the name 'pipeline_cust'. The 'Output' tab shows a table of pipeline runs.

Factory Resources

- Pipelines (1)
 - pipeline_cust
- Datasets (2)
 - AzureSqlTable1
 - DelimitedText1
- Data flows (1)
 - dataflow1
- Power Query (0)

Activities

- Move & transform
- Synapse
- Azure Data Explorer
- Azure Function
- Batch Service
- Databricks
- Data Lake Analytics
- General
- HDInsight
- Iteration & conditionals
- Machine Learning
- Power Query

Properties

General

Name: pipeline_cust

Description:

Annotations

+ New

Output

Type	Run start	Duration	Status
Data flow	4/10/2023, 8:27:52 PM	00:00:51	Succeeded

Microsoft Azure portal interface showing the Query editor (preview) for a SQL database named p4database (p4group1/p4database). The interface includes a sidebar with navigation options like Tags, Diagnose and solve problems, Getting started, Query editor (preview), Settings, Compute + storage, Connection strings, Maintenance, Properties, Locks, Data management, Replicas, Sync to other databases, Integrations, Azure Synapse Link, and Stream analytics (preview).

The main area displays the Query editor with a search bar, login button, and options for New Query, Open query, Feedback, and Getting started. The query editor shows a query titled "Query 2" with the following SQL:

```
1 SELECT TOP (1000) * FROM [dbo].[CustomerNode]
```

The query results are displayed in a table with columns: customerid, firstName, lastName, email, address, and contactNumber. The results show 4 rows of data.

customerid	firstName	lastName	email	address	contactNumber
1	Noellyn	Castagne	ncastagne0@plala.or.jp	Michigan,MI,48267,USA	313-118-0684
2	Park	Meadows	pmeadows1@ebay.co....	Texas,TX,78265,USA	210-554-4115
3	Clarice	Patrone	cpatrone2@miibeian.g...	Virginia,VA,24040,USA	540-858-2361
4	Adrien	Janiszewski	ajaniszewski3@devhu...	New York,NY,10024,USA	917-206-9024

The status bar indicates "Query succeeded | 1s".

Microsoft Azure portal interface showing the Query editor (preview) for a SQL database named p4database (p4group1/p4database). The interface includes a sidebar with navigation options like Tags, Diagnose and solve problems, Getting started, Query editor (preview), Settings, Compute + storage, Connection strings, Maintenance, Properties, Locks, Data management, Replicas, Sync to other databases, Integrations, Azure Synapse Link, and Stream analytics (preview).

The main area displays the Query editor with a search bar, login button, and options for New Query, Open query, Feedback, and Getting started. The query editor shows a query titled "Query 3" with the following SQL:

```
1 SELECT TOP (1000) * FROM [dbo].[ItemNode]
```

The query results are displayed in a table with columns: ItemId, Item, and Price. The results show 4 rows of data.

ItemId	Item	Price
1	Butternut Squash Soup	33.00
2	Vegetable Lasagna	15.00
3	Poke Bowl	33.00
4	Black Bean Burger	11.00

The status bar indicates "Query succeeded | 0s".

Microsoft Azure | Data Factory | NRAP

Factory Resources

- Pipelines: 2
 - pipeline_item
 - pipeline_cust
- Change Data Capture (preview): 0
- Datasets: 4
 - AzureSqlTable1
 - AzureSqlTable2
 - DelimitedText2
 - DelimitedText3
- Data flows: 3
 - dataflow1
 - dataflow2
 - dataflow3
- Power Query: 0

Activities

- Move & transform
- Synapse
- Azure Data Explorer
- Azure Function
- Batch Service
- Databricks
- Data Lake Analytics
- General
- HDInsight
- Iteration & conditionals
- Machine Learning
- Power Query

Activities

Search activities

dataflow1

pipeline_cust

dataflow2

pipeline_item

dataflow3

Validate

Debug

Add trigger

Data flow debug

Data flow

dataflow_item

Parameters

Variables

Settings

Output

Pipeline run ID: 62a0e9b5-1100-4a24-9d13-f34132af273a

View debug run consumption

Name	Type	Run start	Duration
dataflow_item	Data flow	4/10/2023, 8:42:25 PM	00:00:49

Properties

General

Related

Name: pipeline_item

Description

Annotations

+ New

Microsoft Azure

Search resources, services, and docs (G+/)

Home > Microsoft.SqlDatabase.newDatabaseNewServer_977900df68e04137b7f86 | Overview > p4database (p4group1/p4database)

p4database (p4group1/p4database) | Query editor (preview)

SQL database

Search

Login

New Query

Open query

Feedback

Getting started

Tags

Diagnose and solve problems

Getting started

Query editor (preview)

Settings

- Compute + storage
- Connection strings
- Maintenance
- Properties
- Locks

Data management

- Replicas
- Sync to other databases

Integrations

- Azure Synapse Link
- Stream analytics (preview)

p4database (Nishi)

Showing limited object explorer here. For full capability please click here to open Azure Data Studio.

Tables

- dbo.CustomerNode
- dbo.ItemNode
- dbo.OrderEdge
- dbo.RestaurantNode
- dbo.StatusNode

Views

Stored Procedures

Query 2

Query 3

Query 4

Run

Cancel query

Save query

Export data as

Show only Editor

1 SELECT TOP (1000) * FROM [dbo].[StatusNode]

Results

Messages

Search to filter items...

OrderStatusId	OrderStatus
1	Cancelled
2	Delivered
3	Confirmed
4	Delivered

Query succeeded | 0s

Microsoft Azure portal interface showing the Query editor (preview) for a p4database (p4group1/p4database) SQL database.

The interface includes a sidebar with navigation options: Tags, Diagnose and solve problems, Getting started, Query editor (preview), Settings, Compute + storage, Connection strings, Maintenance, Properties, Locks, Data management, Replicas, Sync to other databases, Integrations, Azure Synapse Link, and Stream analytics (preview).

The main area displays the Query editor (preview) for the p4database (Nishi) database. The query editor shows a SQL query:

```
SELECT TOP (1000) * FROM [dbo].[RestaurantNode]
```

The query results are displayed in a table with the following columns: Restaurantid, RestaurantName, Itemid, and IsTakingOrders. The results show 4 rows of data:

Restaurantid	RestaurantName	Itemid	IsTakingOrders
1	Cardify	21	True
2	Daltfresh	48	False
3	Toughjoyfax	33	False
4	Aerified	47	False

The status bar at the bottom indicates "Query succeeded | 0s".

Microsoft Azure | Query editor (preview)

Search resources, services, and docs (G+)

Home > p4database (p4group1/p4database)

p4database (p4group1/p4database) | Query editor (preview)

Search

Login + New Query Open query Feedback Getting started

Overview Activity log Tags Diagnose and solve problems Getting started Query editor (preview)

Settings

- Compute + storage
- Connection strings
- Maintenance
- Properties
- Locks

Data management

- Replicas
- Sync to other databases

Integrations

Showing limited object explorer here. For full capability please click here to open Azure Data Studio.

Tables

- dbo.CustomerNode
- dbo.ItemNode
- dbo.OrderEdge
- dbo.RestaurantNode
- dbo.StatusNode

Views

Stored Procedures

Query 1 Query 2 Query 3

Run Cancel query Save query Export data as Show only Editor

```
1 SELECT TOP (1000) * FROM [dbo].[OrderEdge]
```

Results Messages

Search to filter items...

Orderid	Restaurantid	Customerid	OrderStatusid	Itemid
1	21	9	14	31
2	3	4	11	16
3	19	20	4	11
4	2	7	22	20

Query succeeded | 0s

Microsoft Azure | Data Factory > NRAP

Search

Factory Resources

- Pipelines (5)
 - pipeline_order
 - pipeline_cust
 - pipeline_item
 - pipeline_rest
 - pipeline_status
- Change Data Capture (preview) (0)
- Datasets (11)
- Data flows (5)
 - dataflow1
 - dataflow2
 - dataflow3
 - dataflow4
 - dataflow5
- Power Query (0)

Activities

- Move & transform
- Synapse
- Azure Data Explorer
- Azure Function
- Batch Service
- Databricks
- Data Lake Analytics
- General
- HDInsight
- Iteration & conditionals
- Machine Learning
- Power Query

Validate Debug Add trigger Data flow debug

Data flow

dataflow_order

Properties

General Related

Name *

pipeline_order

Description

Annotations

+ New

Parameters Variables Settings Output

Pipeline run ID: 8e55b483-249a-4f14-bce2-829ab287c270

Type Run start Duration Status

Data flow	4/10/2023, 9:34:33 PM	00:00:54	Succeeded
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