From azure.core.credentials import AzureKeyCredential

From azure.search.documents import SearchClient

Import openai

# Step 1: Set up your Azure Cognitive Search and OpenAI credentials

Search\_service\_name = “<your-search-service-name>”

Index\_name = “finalversion2-empidx”

Admin\_api\_key = “<your-search-admin-api-key>”

Openai.api\_type = “azure”

Openai.api\_base = https://<your-openai-endpoint>.openai.azure.com/

Openai.api\_version = “2024-08-01-preview”

Openai.api\_key = “<your-openai-api-key>”

Deployment\_name = “gpt-4o”

# Step 2: Create a SearchClient

Endpoint = fhttps://{search\_service\_name}.search.windows.net

Search\_client = SearchClient(endpoint=endpoint, index\_name=index\_name, credential=AzureKeyCredential(admin\_api\_key))

# Step 3: Function to query Azure AI Search with pagination

Def search\_azure(query, top=5, skip=0):

“””Perform a paginated search query to Azure AI Search.”””

Results = search\_client.search(query, top=top, skip=skip)

Return [result[‘content’] for result in results if ‘content’ in result]

# Step 4: Function to query OpenAI with retrieved search results

Def query\_openai(content):

“””Query Azure OpenAI with the provided content.”””

Try:

Response = openai.ChatCompletion.create(

Engine=deployment\_name,

Messages=[

{“role”: “system”, “content”: “You are a helpful assistant.”},

{“role”: “user”, “content”: content}

],

Max\_tokens=800 # Adjust as needed

)

Return response.choices[0].message[‘content’].strip()

Except Exception as e:

Print(f”Error querying OpenAI: {e}”)

Return None

# Step 5: Main logic to fetch data iteratively and process it

Def fetch\_and\_process(query, batch\_size=5):

“””Fetch and process data in batches using Azure AI Search and OpenAI.”””

Skip = 0

Final\_output = []

While True:

# Fetch a batch of search results

Search\_results = search\_azure(query, top=batch\_size, skip=skip)

If not search\_results:

Break

# Concatenate search results into a single string

Content\_to\_process = “\n”.join(search\_results)

# Query OpenAI with the fetched content

Openai\_response = query\_openai(f”Based on the following data, calculate the total number of awards won by sales and marketing:\n\n{content\_to\_process}”)

If openai\_response:

Final\_output.append(openai\_response)

# Move to the next batch

Skip += batch\_size

# Combine and print the final output

Combined\_output = “\n”.join(final\_output)

Print(“Final Output:\n”, combined\_output)

Return combined\_output

# Step 6: Run the process with your query

Query = “total number of awards won by sales and marketing”

Fetch\_and\_process(query)