PYTHON CODE TO EXTRACT ID INFORMATION

I need to install the required library:

!pip install azure-ai-formrecognizer

I install azure-storage-blob to generate de SAS codes automatically in Python to access directly to the blob storage directly in step 5

!pip install azure-storage-blob

Import required Libraries

```
In [13]: import os, json
    from azure.core.credentials import AzureKeyCredential
    from azure.ai.formrecognizer import DocumentAnalysisClient
    from azure.storage.blob import (
        BlobSasPermissions,
        generate_blob_sas,
        BlobServiceClient
)
from datetime import datetime, timedelta
```

Azure authentication

```
In [ ]: endpoint = "https://document-intelligence-udacity.cognitiveservices.azure.com/"
    key = "Add your key here"
    client = DocumentAnalysisClient(endpoint, AzureKeyCredential(key))
    print(client)
```

<azure.ai.formrecognizer._document_analysis_client.DocumentAnalysisClient object
at 0x00000174410F3E10>

Azure authentication Blob storage and SAS creation

```
In [ ]: account name = "001finalproject"
         account key = "Add your key here"
         container name = "step2"
         blob_name = "digital_id_Alberto_Leon.pdf"
In [16]: # SAS expliry time
         sas_expiry = datetime.utcnow() + timedelta(hours=1)
         # URL base
         blob url base = f"https://{account name}.blob.core.windows.net/{container name}/
         # token generation
         sas_token = generate_blob_sas(
             account_name=account_name,
             container name=container name,
             blob_name=blob_name,
             account_key=account_key,
             permission=BlobSasPermissions(read=True),
             expiry=sas_expiry
```

```
# Construir La URL completa
blob_url_with_sas = f"{blob_url_base}?{sas_token}"

In [17]: print(blob_url_with_sas)
```

https://001finalproject.blob.core.windows.net/step2/digital_id_Alberto_Leon.pdf?s e=2025-06-23T22%3A01%3A54Z&sp=r&sv=2025-05-05&sr=b&sig=Pke4ZtApI1AHsdYxWcgAHD0FI3 f/%2B0oB/C6yPM9a/SA%3D

Analysis

```
In [19]: # 1) Analyze the document
         poller = client.begin_analyze_document_from_url(
                     model_id="prebuilt-idDocument",
                     document_url=blob_url_with_sas,
                     locale="en-US"
                   )
         result = poller.result()
         # 2) Print the results
         for doc in result.documents:
             fields = doc.fields
             data = {
                 "FirstName":
                                fields.get("FirstName", {}).value if "FirstName"
                 "LastName":
                                fields.get("LastName", {}).value if "LastName"
                                                                                      in f
                 "DateOfBirth": fields.get("DateOfBirth", {}).value if "DateOfBirth" in f
                 "DocumentNum": fields.get("DocumentNumber", {}).value if "DocumentNumber
             print(json.dumps(data, indent=2, ensure_ascii=False))
          "FirstName": "Alberto",
          "LastName": "León",
          "DateOfBirth": null,
          "DocumentNum": "D4587987"
        }
In [ ]:
```