Importing Libraries

```
from google.oauth2 import service_account
from googleapiclient.discovery import build
import pandas as pd
import requests
from io import StringIO
from io import BytesIO
```

Path for Door and Scope

```
service_account_file = "/content/credit-analysis-api-30ab217d969b.json"
scope = ['https://www.googleapis.com/auth/drive.readonly']
```

Authenticate and Create Services

```
credentials = service_account.Credentials.from_service_account_file(service_account_file, scopes=scope)
drive_service = build('drive', 'v3', credentials=credentials)
```

Folder ID

```
folder_id = "10XpXAz-Gz-zlfpfOMFh1rH3HWgxkUGBx"
```

Creating a Function to List all the Files in Google Drive

```
def list_files(service, folder_id):
    results = service.files().list(q=f"'{folder_id}' in parents", fields="files(id, name, mimeType)").execute()

    return results.get('files', [])
```

```
files = list_files(drive_service, folder_id)
files
```
```
[{'id': '1l-QClOnS3BDKork1eYq7W0WJmSDjGOXv',
  'name': 'GlobalSuperstore.xlsx',
  'mimeType': 'application/vnd.openxmlformats-officedocument.spreadsheetml.sheet'}]
```

Converting List of Files to List of DataFrames

```
file_df = []

for file in files:
  file_id = file['id']
  file_name = file['name']
  mime_type = file['mimeType']

  if mime_type == 'application/vnd.google-apps.spreadsheet':
    download_url = f"https://docs.google.com/spreadsheets/d/{file_id}/export?format=csv"
  elif mime_type == 'text/csv':
    download_url = f"https://drive.google.com/uc?export=download&id={file_id}"
  elif mime_type == 'application/vnd.openxmlformats-officedocument.spreadsheetml.sheet':
    download_url = f"https://drive.google.com/uc?export=download&id={file_id}"
  else:
    continue

  response = requests.get(download_url)
  if response.status_code == 200:
    if mime_type == 'application/vnd.openxmlformats-officedocument.spreadsheetml.sheet':
      df = pd.read_excel(BytesIO(response.content))
    else:
      df = pd.read_csv(StringIO(response.content.decode('utf-8')))
    file_df.append(df)
  else:
    print(f"Error downloading file: {file_name}")
```

```
file_df
```

```
[       Row ID       Order ID Order Date  Ship Date      Ship Mode  \
0       32298    CA-2012-124891 2017-07-31 2017-07-31      Same Day
1       26341     IN-2013-77878 2018-02-05 2018-02-07  Second Class
2       25330     IN-2013-71249 2018-10-17 2018-10-18   First Class
3       13524   ES-2013-1579342 2018-01-28 2018-01-30   First Class
4       47221      SG-2013-4320 2018-11-05 2018-11-06      Same Day
...       ...             ...        ...        ...           ...
51285   29002     IN-2014-62366 2019-06-19 2019-06-19      Same Day
51286   35398   US-2014-102288 2019-06-20 2019-06-24 Standard Class
51287   40470   US-2013-155768 2018-12-02 2018-12-02      Same Day
51288    9596   MX-2012-140767 2017-02-18 2017-02-22 Standard Class
51289    6147   MX-2012-134460 2017-05-22 2017-05-26  Second Class

       Customer ID      Segment           City           State        Country  \
0        RH-19495     Consumer  New York City        New York  United States
1        JR-16210    Corporate     Wollongong New South Wales      Australia
2        CR-12730     Consumer       Brisbane      Queensland      Australia
3        KM-16375  Home Office         Berlin          Berlin        Germany
4        RH-9495      Consumer         Dakar           Dakar        Senegal
...           ...          ...            ...             ...            ...
51285    KE-16420    Corporate           Kure       Hiroshima          Japan
51286    ZC-21910     Consumer        Houston           Texas  United States
51287    LB-16795  Home Office         Oxnard      California  United States
51288    RB-19795  Home Office       Valinhos       São Paulo         Brazil
51289    MC-18100     Consumer       Tipitapa         Managua      Nicaragua

       ...       Product ID      Category Sub-Category  \
0      ...    TEC-AC-10003033    Technology  Accessories
1      ...    FUR-CH-10003950     Furniture       Chairs
2      ...    TEC-PH-10004664    Technology       Phones
3      ...    TEC-PH-10004583    Technology       Phones
4      ...    TEC-SHA-10000501   Technology      Copiers
...    ...             ...            ...          ...
51285  ...    OFF-FA-10000746  Office Supplies   Fasteners
51286  ...    OFF-AP-10002906  Office Supplies   Appliances
51287  ...    OFF-EN-10001219  Office Supplies   Envelopes
51288  ...    OFF-BI-10000806  Office Supplies     Binders
51289  ...    OFF-PA-10004155  Office Supplies       Paper

                                        Product Name      Sales Quantity  \
0      Plantronics CS510 - Over-the-Head monaural Wir...  2309.650        7
1               Novimex Executive Leather Armchair, Black  3709.395        9
2                     Nokia Smart Phone, with Caller ID  5175.171        9
3                       Motorola Smart Phone, Cordless  2892.510        5
4                        Sharp Wireless Fax, High-Speed  2832.960        8
...                                            ...        ...      ...
51285                      Advantus Thumb Tacks, 12 Pack    65.100        5
51286  Hoover Replacement Belt for Commercial Guardsm...     0.444        1
51287       #10- 4 1/8" x 9 1/2" Security-Tint Envelopes    22.920        3
51288                            Acco Index Tab, Economy    13.440        2
51289             Eaton Computer Printout Paper, 8.5 x 11    61.380        3

       Discount    Profit  Shipping Cost  Order Priority
0           0.0  762.1845        933.570        Critical
1           0.1 -288.7650        923.630        Critical
2           0.1  919.9710        915.490          Medium
3           0.1  -96.5400        910.160          Medium
4           0.0  311.5200        903.040        Critical
```

Combining all the DataFrames into one single DataFrame

```
if file_df:
    combined_df = pd.concat(file_df, ignore_index=True)
```

```
combined_df
```

	Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer ID	Segment	City	State	Country	...	Product ID	Category	
0	32298	CA-2012-124891	2017-07-31	2017-07-31	Same Day	RH-19495	Consumer	New York City	New York	United States	...	TEC-AC-10003033	Technology	A
1	26341	IN-2013-77878	2018-02-05	2018-02-07	Second Class	JR-16210	Corporate	Wollongong	New South Wales	Australia	...	FUR-CH-10003950	Furniture	
2	25330	IN-2013-71249	2018-10-17	2018-10-18	First Class	CR-12730	Consumer	Brisbane	Queensland	Australia	...	TEC-PH-10004664	Technology	
3	13524	ES-2013-1579342	2018-01-28	2018-01-30	First Class	KM-16375	Home Office	Berlin	Berlin	Germany	...	TEC-PH-10004583	Technology	
4	47221	SG-2013-4320	2018-11-05	2018-11-06	Same Day	RH-9495	Consumer	Dakar	Dakar	Senegal	...	TEC-SHA-10000501	Technology	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	
51285	29002	IN-2014-62366	2019-06-19	2019-06-19	Same Day	KE-16420	Corporate	Kure	Hiroshima	Japan	...	OFF-FA-10000746	Office Supplies	
51286	35398	US-2014-102288	2019-06-20	2019-06-24	Standard Class	ZC-21910	Consumer	Houston	Texas	United States	...	OFF-AP-10002906	Office Supplies	A
51287	40470	US-2013-155768	2018-12-02	2018-12-02	Same Day	LB-16795	Home Office	Oxnard	California	United States	...	OFF-EN-10001219	Office Supplies	
51288	9596	MX-2012-140767	2017-02-18	2017-02-22	Standard Class	RB-19795	Home Office	Valinhos	São Paulo	Brazil	...	OFF-BI-10000806	Office Supplies	
51289	6147	MX-2012-134460	2017-05-22	2017-05-26	Second Class	MC-18100	Consumer	Tipitapa	Managua	Nicaragua	...	OFF-PA-10004155	Office Supplies	

51290 rows × 23 columns