In [1]:
```
import pandas as pd
import numpy as np
import os
from sqlalchemy import create_engine
```

In [2]:
```
#Reading Excel File using pandas
olist_database = pd.ExcelFile('olist business database.xlsx')
olist_database
```

Out[2]:
```
<pandas.io.excel._base.ExcelFile at 0x21973f83eb0>
```

In [3]:
```
#Listing out all sheets in the Excel file
olist_database.sheet_names
```

Out[3]:
```
['olist_Customer_table',
 'olist_geolocation_table',
 'olist_order_items_table',
 'olist_order_payment_table',
 'olist_order_reviews_table',
 'olist_orders_table',
 'olist_products_table',
 'olist_sellers_table',
 'olist_product_category']
```

In [4]:
```
#Creating extract function for ETL process
def extract_from_excel_sheet(excelfilename):
    query = olist_database.parse(excelfilename)
    return query
```

In [5]:
```
#Writing load function for ETL process
def load_to_sql_server(df, tablename, db_engine):
    return df.to_sql(tablename, db_engine, if_exists = 'replace', index = False)
```

In [6]:
```
#Putting ETL all together, this code extracts tables/sheets from the Excel file and parses the tables to SQL
#where the database relationships will be established.
def extract_and_load(excelfilename, tablename):
    df = extract_from_excel_sheet(excelfilename)

    load_to_sql_server(df, tablename, db_engine)
```

In [7]:
```
#Getting connection details to SQL server using environemtal variables
SERVER = os.environ.get('MS SQL SERVER NAME')
DRIVER = os.environ.get('MS SQL SERVER DRIVER')
database_name = 'olist_db'
```

In [8]:
```
#Estalishing connection with database
connection = f'mssql://{SERVER}/{database_name}?driver={DRIVER}'
```

In [10]:
```
db_engine = create_engine(connection)
```

In [11]:
```
#Finally lets load all tables into SQL SERVER
extract_and_load('olist_Customer_table', 'staging_olist_Customer_table')
extract_and_load('olist_geolocation_table', 'staging_olist_geolocation_table')
extract_and_load('olist_order_items_table', 'staging_olist_order_items_table')
extract_and_load('olist_order_payment_table', 'staging_olist_order_payment_table')
extract_and_load('olist_order_reviews_table', 'staging_olist_order_reviews_table')
extract_and_load('olist_orders_table', 'staging_olist_orders_table')
extract_and_load('olist_products_table', 'staging_olist_products_table')
extract_and_load('olist_sellers_table', 'staging_olist_sellers_table')
extract_and_load('olist_product_category', 'staging_olist_product_category')
```

In [12]:
```
extract_and_load('olist_products_table', 'staging_olist_products_table')
```

In [13]:
```
connection.close()
```

In [14]:

In [15]:

In [16]:

In [ ]:

In [ ]:

In [ ]:

In [ ]:

In [ ]: