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LAB1B: CONNECTING AND RETRIEVING DATA FROM SQL SERVER

code explain

Used pyodbc to connect and execute query on database. Data given in AdventureWorks2019.bak. Used pandas to save queried data to dataframe and csv file.

Data joined by key AddressID .

```
In [2]: import pandas as pd
        import pyodbc
In [5]: server = 'MINHLAP\SQLEXPRESS'
        conn = pyodbc.connect('DRIVER={SQL Server};SERVER='+server+';DATABASE=AdventureWork
        cursor = conn.cursor()
        # query data từ preson.EmailAddress, preson.BusinessEntityAddress, và preson.Addre
        cursor.execute('''
                SELECT a.AddressID,
                    e.EmailAddress,
                    a.AddressLine1,
                    a.AddressLine2,
                    a.StateProvinceID,
                    a.City,
                    a.PostalCode,
                    a.SpatialLocation,
                    a.rowguid,
                    a.ModifiedDate
                 FROM Person. Email Address as e
                JOIN Person.BusinessEntityAddress as bea
                    ON e.BusinessEntityID = bea.BusinessEntityID
                 JOIN Person.Address as a
                    ON bea.AddressID = a.AddressID
        # Lưu tất cả data vào dataframe
        rows = cursor.fetchall()
        columns = [column[0] for column in cursor.description]
        df = pd.DataFrame.from_records(rows, columns=columns)
        df
       <>:1: SyntaxWarning: invalid escape sequence '\S'
       <>:1: SyntaxWarning: invalid escape sequence '\S'
       C:\Users\quang\AppData\Local\Temp\ipykernel_9332\3704467224.py:1: SyntaxWarning: inv
       alid escape sequence '\S'
         server = 'MINHLAP\SQLEXPRESS'
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In [6]: # luu thành file csv
df.to_csv('persondata.csv', index=True)