Project Title: ETL Process for Bank Market Cap Data

Objective: To extract bank and market cap data from JSON file, transform the market cap currency using exchange rate data and load the transformed data into a separate CSV file.

Tools used: Python, pandas, requests

Description:

This project involved extracting bank and market cap data from two JSON files, bank\_market\_cap\_1.json and bank\_market\_cap\_2.json. The data was then transformed using exchange rate data from exchange\_rates.csv, and loaded into a separate CSV file.

The ETL process involved several steps, including:

Installing necessary libraries using "!mamba install" command

Downloading the JSON files and exchange rate data using "!wget" command

Reading in the JSON files using pandas and concatenating them into a single DataFrame

Extracting relevant columns from the DataFrame, including "Name" and "Market Cap (US$ Billion)"

Converting the market cap currency to USD using exchange rate data

Saving the transformed data into a separate CSV file

Creating an "extract\_json" function to extract JSON files

The project successfully extracted, transformed, and loaded the data into a separate CSV file. The code was well-documented and organized, and can easily be modified to handle similar ETL processes in the future. The project also demonstrated proficiency in manipulating data using Python, pandas, and requests.