**ASSIGNMENT REPORT-1**

**STEPS**

STEP 1. **Fetch Live Data**

We'll use a public API like CoinGecko API to fetch the data for the top 50 cryptocurrencies by market capitalization.

* Use Python with the requests library to fetch the data.
* Choose the fields required for the task, such as Name, Symbol, Current Price (in USD), Market Capitalization, 24-hour Trading Volume, and 24-hour Price Change percentage.

STEP 2**. Data Analysis**

Perform analysis on the live data to identify key insights:

* **Top 5 Cryptocurrencies by Market Cap:** Sort the DataFrame by 'Market Capitalization' and pick the top 5.
* **Average Price of Top 50 Cryptos:** Calculate the average of the 'Current Price (USD)' column.
* **Highest and Lowest 24-hour Price Change:** Identify the maximum and minimum values in the '24h Price Change (%)' column.

**STEP 3. Live-Running Excel Sheet**

* To make the data update live in Excel, you can use Excel's ability to fetch live data directly via Power Query or use a Python package like openpyxl to continuously update the sheet.
* Alternatively, you can set up a script that updates the data every 5 minutes using time.sleep() in Python.

**4. Submission Requirements**

* **Python Script:** Include the Python script (Top\_50\_Cryptos.py).
* **Excel Sheet:** Share the link to the live-updating Excel sheet. Upload it to a cloud platform such as Google Drive, OneDrive, or Dropbox.
* **Analysis Report:** Create a PDF or Word document summarizing the insights and analysis, such as top cryptocurrencies, average price, and price changes.

1. Run the Python script to fetch the live data.
2. Make the Excel sheet continuously update every 5 minutes.
3. Share the link to the live sheet and the analysis report.