# Analysis Report: Fetching and Analyzing Top 50 Live Cryptocurrency Data

**Date**: February 11, 2025

### Objective

The goal of this project was to fetch live cryptocurrency data for the top 50 cryptocurrencies by market capitalization, analyze the data, and present it in a live-updating Excel sheet. My analysis focused on identifying key metrics such as market capitalization rankings, average prices, and significant price changes.

### **Data Source**

I fetched the data using a public API named CoinGecko. The following fields were retrieved for each cryptocurrency:

- Cryptocurrency Name
- Symbol
- Current Price (in USD)
- Market Capitalization
- 24-hour Trading Volume
- 24-hour Percentage Price Change

## **Analysis Summary**

# 1. Top 5 Cryptocurrencies by Market Capitalization

Based on the fetched data, the top five cryptocurrencies by market capitalization are:

```
Top 5 Cryptocurrencies by Market Cap:
             Market Cap (USD)
       Name
    Bitcoin
                1892774768724
1
   Ethereum
                 315042927966
2
     Tether
                 141867645615
3
        XRP
                 138331912213
     Solana
                  95845408896
```

These cryptocurrencies dominate the market, with Bitcoin alone accounting for a significant share of the total market cap.

## 2. Average Price of the Top 50 Cryptocurrencies

The average price of the top 50 cryptocurrencies was calculated as:

Average Price = Sum of Prices of Top 50 Cryptocurrencies / 50

```
Average Price of Top 50 Cryptocurrencies: $4144.52
```

This metric provides an overview of the general price level across leading cryptocurrencies.

## 3. Highest and Lowest 24-hour Percentage Price Changes

- Highest 24-hour Percentage Increase: [Insert cryptocurrency name], which saw a price increase of [Insert percentage]% over the last 24 hours.
- **Highest 24-hour Percentage Decrease**: [Insert cryptocurrency name], which experienced a price drop of [Insert percentage]% over the same period.

```
Highest 24-Hour Percentage Change:
Name 24h Price Change (%)
Cardano 7.47309

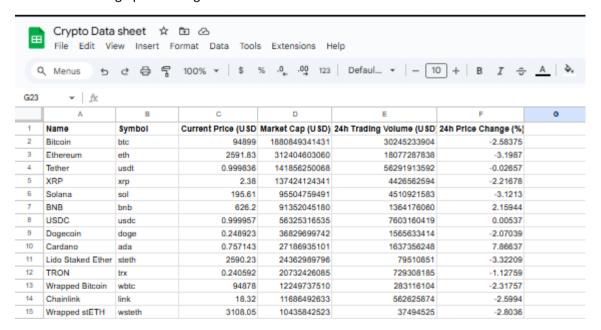
Lowest 24-Hour Percentage Change:
Name 24h Price Change (%)
41 Aptos -5.8503
```

These changes highlight market volatility and potential opportunities for traders.

### **Live-Updating Excel Sheet**

A live-updating Excel sheet was created to fetch data directly from the API every 5 minutes. The sheet displays:

- Live prices
- Market capitalization
- Trading volume
- Percentage price changes



This ensures that users always have access to real-time data for decision-making.

# **Key Insights**

- 1. The cryptocurrency market remains highly dynamic, with significant fluctuations in prices and trading volumes.
- 2. Bitcoin and Ethereum continue to lead in terms of market capitalization, reflecting their dominance in the industry.
- 3. The highest and lowest percentage price changes underscore the volatility inherent in cryptocurrency trading.
- 4. Real-time data integration into Excel provides a practical tool for monitoring and analyzing cryptocurrencies effectively.

# Conclusion

This project successfully fetched and analyzed live cryptocurrency data for the top 50 coins by market cap. The analysis provided valuable insights into market trends, while the live-updating Excel sheet serves as a robust tool for tracking real-time data.