

Cryptocurrency Data Analysis Report

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Abstract

This report presents an analysis of the top 50 cryptocurrencies by market capitalization fetched from the CoinMarketCap API. The data includes various key metrics such as current price, market capitalization, 24-hour trading volume, and price change over the last 24 hours. Additionally, the report contains insights from the analysis of these metrics, including the top 5 cryptocurrencies by market cap, the average price, and the highest and lowest percentage changes in the last 24 hours.

1 Introduction

Cryptocurrencies have become an integral part of modern financial systems, with many investors and traders seeking to leverage these digital assets. This report focuses on the top 50 cryptocurrencies by market capitalization, providing key metrics and an analysis based on live data fetched from the CoinMarketCap API.

2 Data Fetching

The data for the top 50 cryptocurrencies was fetched using the CoinMarketCap API. The following key metrics were extracted for each cryptocurrency:

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

- 24-hour Price Change (Percentage)

The data was continuously updated every 5 minutes, providing live metrics for the top 50 cryptocurrencies.

3 Data Analysis

The data was analyzed to derive key insights, which include identifying the top 5 cryptocurrencies by market capitalization, calculating the average price of the top 50 cryptocurrencies, and analyzing the highest and lowest 24-hour percentage price changes.

3.1 Top 5 Cryptocurrencies by Market Cap

The top 5 cryptocurrencies by market capitalization are:

Name	Symbol	Price (USD)	Market Cap (USD)	24h Volume (USD)	24h C
Bitcoin	BTC	98,195.79	1,944,377,196,546	39,508,648,067	
Ethereum	ETH	3,453.70	416,034,632,995	20,142,149,612	
Tether USDt	USDT	0.9994	139,343,953,292	102,526,441,201	
XRP	XRP	2.2709	130,012,995,725	4,526,657,261	
BNB	BNB	700.58	100,888,435,969	953,410,251	

3.2 Average Price of Top 50 Cryptocurrencies

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

$$\text{Average Price} = 2,089.21 \text{ USD}$$

3.3 Highest and Lowest 24-hour Percentage Change

The highest 24-hour percentage change was observed in **Bitget Token (BGB)** with a change of **+15.73%**, while the lowest change was observed in **Hyperliquid (HYPE)** with a change of **-9.04%**.

4 Excel Integration

The live data was integrated into an Excel sheet using Python and the CoinMarketCap API. The Excel sheet continuously updates every 5 minutes to display live data for all 50 cryptocurrencies. The key metrics (price, market cap, volume, and

24-hour change) are updated in real-time, providing up-to-date information for analysis.

5 Conclusion

This report provides an overview of the top 50 cryptocurrencies, presenting both raw data and analysis. The use of the CoinMarketCap API ensures that the data is constantly updated, providing accurate insights into the rapidly changing cryptocurrency market. Key insights include the top 5 cryptocurrencies by market cap, average price, and the highest and lowest 24-hour price changes. Further analysis can be conducted to explore trends and predict potential market movements.

6 References

- CoinMarketCap API documentation: <https://coinmarketcap.com/api/>
- Cryptocurrency data: Real-time data fetched from CoinMarketCap API.