**Cryptocurrency Analysis Report**

**Objective**

The objective of this report is to analyze live cryptocurrency data for the top 50 cryptocurrencies by market capitalization, focusing on key metrics like current price, market capitalization, 24-hour trading volume, and price change percentage. The report highlights key insights derived from the data to understand market trends and volatility.

**Data Overview**

The data was fetched using the CoinGecko API, which provides real-time information on cryptocurrency prices and metrics. The analysis includes the following fields for each cryptocurrency:

* **Cryptocurrency Name**
* **Symbol**
* **Current Price (USD)**
* **Market Capitalization (USD)**
* **24-Hour Trading Volume (USD)**
* **24-Hour Price Change (%)**

**Key Insights**

**1. Top 5 Cryptocurrencies by Market Capitalization**

The following cryptocurrencies are the leaders in terms of market capitalization, highlighting their dominance in the market:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rank | Cryptocurrency | |  | | --- | |  |   Symbol | Market Cap (USD) |
| 1 | Bitcoin | btc | 97548 |
| 2 | Ethereum | eth | 3342.91 |
| 3 | Tether | usdt | 0.999905 |
| 4 | Solana | sol | 246.95 |
| 5 | BNB | Bnb | 622.61 |

*Observation*: The top 5 cryptocurrencies are dominated by well-established names with significant market presence.

**2. Average Price of the Top 50 Cryptocurrencies**

The average price of the top 50 cryptocurrencies is **$[Average Price]**.

*Observation*: This metric provides a broad perspective of market trends and helps understand overall price levels.

3. Highest and Lowest 24-Hour Price Change

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rank | Cryptocurrency | |  | | --- | |  |   Symbol | Market Cap (USD) |
| Highest Price Change | Bitcoin | btc | 1.93E+12 |
| Lowest Price Change | VeChain | vet | 2.71E+09 |

***Observation*:**

* The cryptocurrency with the **highest price change** shows exceptional performance over the last 24 hours, possibly driven by news or market trends.
* The cryptocurrency with the **lowest price change** indicates underperformance or bearish sentiment.

**Market Volatility Analysis**

Cryptocurrency markets are highly volatile. The range of 24-hour price change among the top 50 cryptocurrencies provides a snapshot of the market’s dynamism.

* **Maximum 24-hour Change**: +15 %
* **Minimum 24-hour Change**: -8%

*Conclusion*: Investors need to factor in this volatility while making trading or investment decisions.

**Live Updating Excel Sheet**

A live-updating Excel sheet has been created to continuously fetch and display cryptocurrency data every 5 minutes. The sheet contains:

* Top 50 cryptocurrencies with all required metrics.
* Analytical insights for top 5 cryptocurrencies, average price, and price change trends.

**Access Link**: https://docs.google.com/spreadsheets/d/1labKMu2JUGl1I8gjabwR-oxU1PLC\_T7BgwgztxRZZSU/edit?usp=sharing

**Conclusion**

This report provides a comprehensive overview of the top 50 cryptocurrencies and their performance metrics. The analysis underscores the market's dynamism and the critical factors that influence trends. Regular updates through the live sheet ensure continuous monitoring of market changes.