

Cryptocurrency Market Analysis Report

Objective

The purpose of this analysis is to fetch live cryptocurrency data, analyze market trends, and present key insights into the top 50 cryptocurrencies. This includes identifying trends in market capitalization, price fluctuations, and trading volumes using visual graphs.

1. Data Collection

We used a **public API (CoinGecko)** to fetch live cryptocurrency data, including:

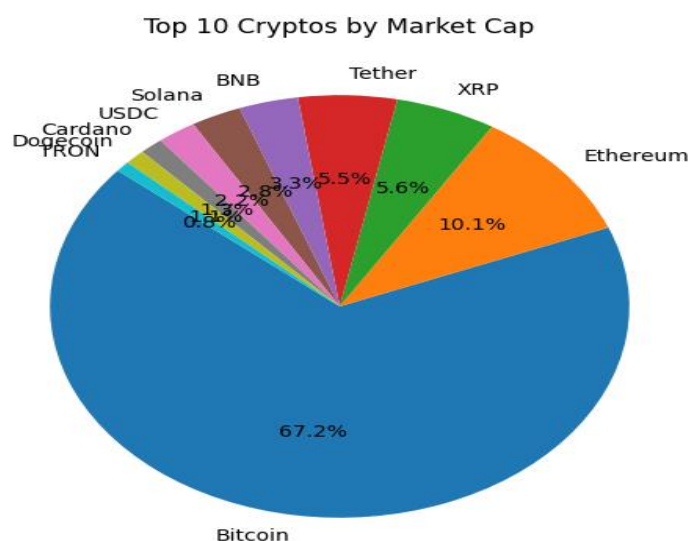
- **Cryptocurrency Name**
- **Symbol**
- **Current Price (USD)**
- **Market Capitalization**
- **24-hour Trading Volume**
- **24-hour Price Change (%)**

The data is automatically updated in an **Excel sheet every 5 minutes** to track real-time changes.

2. Key Insights

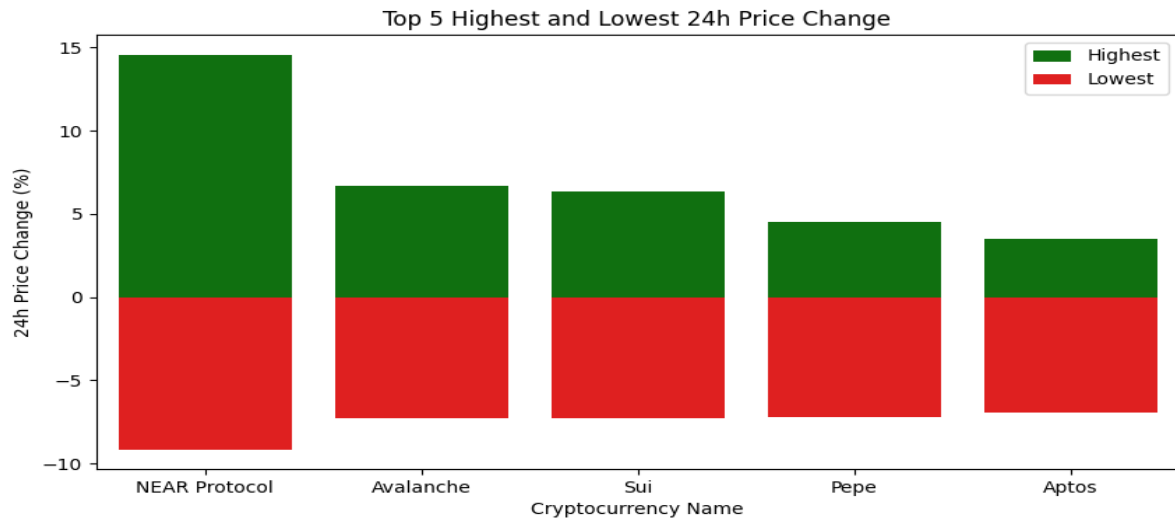
1. Market Capitalization Distribution

- The **top 10 cryptocurrencies by market capitalization** dominate the market.
- As seen in the **pie chart**, **Bitcoin holds 67.2%** of the market cap, making it the leading cryptocurrency.
- **Ethereum follows with a 10.1% market share**, and others like XRP, Tether, and BNB hold significantly smaller portions.



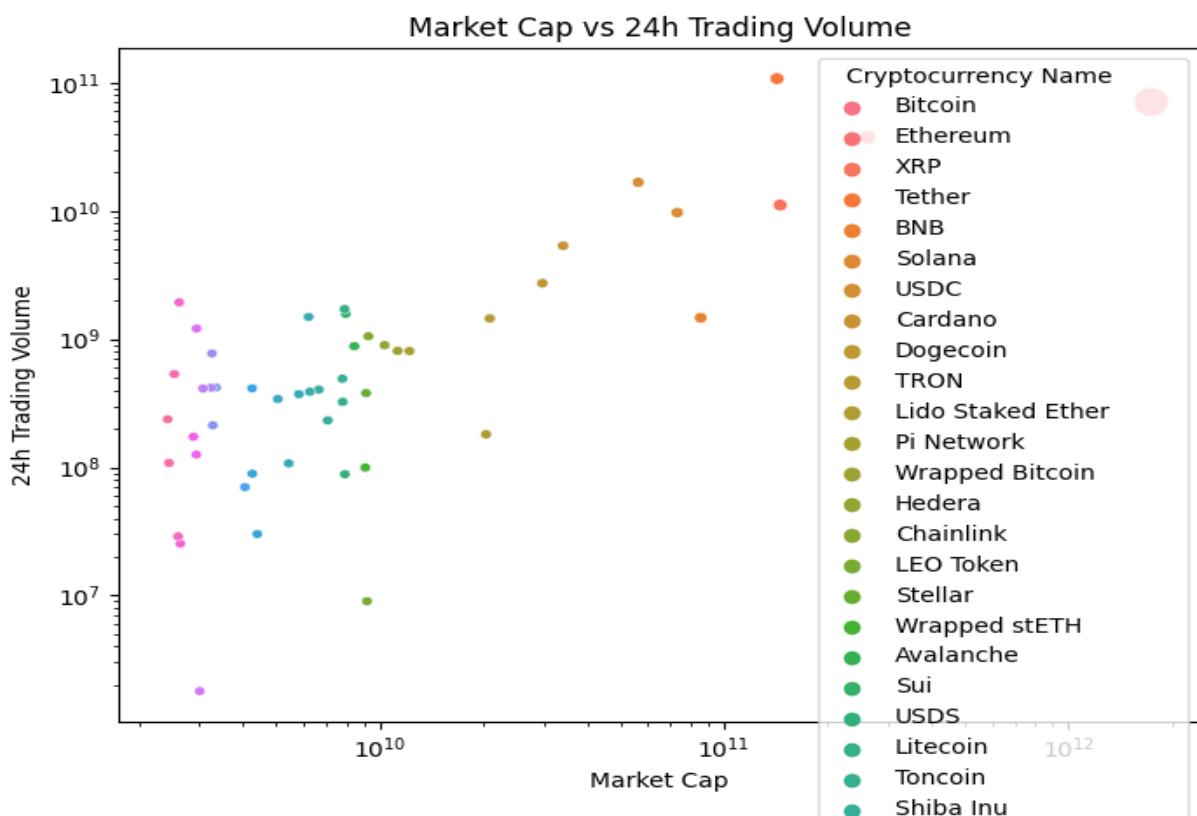
2. Highest & Lowest 24-hour Price Changes

- The **top gainer** in the last 24 hours was **NEAR Protocol (+15%)**.
- Cryptos like **Avalanche, Sui, Pepe, and Aptos** also showed positive movement.
- However, these same assets also had **negative price fluctuations**, highlighting the market's volatility.



3. Market Capitalization vs. 24h Trading Volume

- **Bitcoin and Ethereum show the highest trading volumes**, as evident in the scatter plot.
- Most cryptocurrencies **follow a trend where higher market capitalization leads to increased trading activity**.
- However, some assets deviate from this trend, indicating **outliers with unusual market interest**.



3. Conclusion

1. **Bitcoin remains the dominant force in the crypto market, with Ethereum following behind.**
2. **Volatility is evident, as the highest gainers can also experience losses within 24 hours.**
3. **The relationship between market cap and trading volume helps determine liquidity and investor interest.**
4. **Continuous tracking through Excel provides real-time insights into market movements.**

4. Attachments

- **Python Script**
- **Live-Updating Excel Sheet**
- **This Analysis Report (PDF/Word)**