1. Introduction

This report provides an analysis of the top 50 cryptocurrencies based on live data fetched from the CoinGecko API. The dataset includes key financial metrics such as price, market capitalization, trading volume, and price changes over 24 hours.

The objective of this analysis is to:
✔️ Identify the **top 5 cryptocurrencies** by market capitalization.
✔️ Calculate the **average price** of the top 50 cryptocurrencies.
✔️ Determine the **highest and lowest 24-hour percentage price changes** among the top 50 coins.

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2. Data Overview

The data was collected using a Python script that fetched live cryptocurrency data. The key attributes considered in the analysis include:

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

The data is updated every 5 minutes and stored in an Excel sheet for real-time tracking.

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3. Key Findings

3.1 Top 5 Cryptocurrencies by Market Capitalization

Rank	Name	Symbol	Market Cap (USD)
1	Bitcoin	BTC	1.66E+12
2	Ethereum	ETH	2.53E+11
3	tether	USDT	1.43E+11
4	xrp	XRP	1.35E+11
5	binance-coin	BNB	8.09E+10

📌 **Insight:** Bitcoin and Ethereum remain the dominant players, holding a significant share of the total market capitalization.

📌 The average price of the top 10 cryptocurrencies is **$8,662.32**.
📌 The distribution of prices varies widely, with some altcoins trading under a dollar while Bitcoin dominates with a five-figure price.

3.2 Highest & Lowest 24h Percentage Price Change

📊 **Highest Gainer (24h % Change):**

>>usd coin surged by **0.000336%** in the last 24 hours.

📉 **Biggest Loser (24h % Change):**

>> Cardano dropped by 23.8507**%** in the last 24 hours.