

Report On Terminologies Of Data

March 31, 2025

1 Overview of the Dataset

The dataset used in this project consists of stock market data for ten specific companies. Each row in the dataset corresponds to a trading day, and each column represents a different attribute of the trading data. This section details these attributes and explains their importance in understanding the market behavior.

2 Data Attributes and Their Meanings

2.1 Date

Definition: The trading date for the record (e.g., 28-Mar-2025).

Purpose: Helps in identifying when the data was recorded and is essential for performing time-series analysis.

2.2 Series

Definition: Indicates the market segment in which the stock is traded. For example, EQ stands for the Equity segment.

Purpose: Differentiates the stock from those traded in other segments like derivatives or SME markets.

2.3 Price Attributes

- **OPEN:** The price at which the stock starts trading at market open.
- **HIGH:** The highest price the stock reached during the trading day.
- **LOW:** The lowest price the stock reached during the trading day.
- **PREV. CLOSE:** The closing price of the stock on the previous trading day.
- **LTP (Last Traded Price):** The most recent price at which the stock was traded before the market closed.
- **CLOSE:** The final price of the stock at the end of the trading session.

Purpose: These metrics illustrate the stock's daily price fluctuations and help in assessing market volatility and trend direction.

2.4 VWAP (Volume Weighted Average Price)

Definition: The average price at which the stock was traded during the day, weighted by the volume at each price level. **Purpose:** Provides a more representative average trading price by accounting for the trading volume, which can help smooth out extreme values.

2.5 52-Week High (52W H) and 52-Week Low (52W L)

Definition:

- **52W H:** The highest price achieved by the stock in the last 52 weeks.
- **52W L:** The lowest price achieved by the stock in the last 52 weeks.

Purpose: These metrics offer a long-term perspective on the stock's performance, indicating its historical price range.

2.6 Volume

Definition: The total number of shares traded during a particular trading session. **Purpose:** Indicates the overall trading activity and liquidity of the stock. High volume suggests increased investor interest.

2.7 Value

Definition: The total monetary value of the shares traded during the day. **Purpose:** Provides insight into the capital flow and the economic scale of the trading day.

2.8 Number of Trades

Definition: The total count of individual transactions executed during the trading session. **Purpose:** Complements the volume data by showing how many separate transactions occurred, which can further illuminate market activity patterns.

3 Interpreting the Data

Analyzing the dataset allows us to draw several insights:

- **Market Activity:** A comparison of *Volume* and *Number of Trades* helps in understanding investor engagement and liquidity.
- **Price Volatility:** Daily fluctuations in the *OPEN*, *HIGH*, *LOW*, *LTP*, and *CLOSE* prices indicate market volatility.
- **Trading Trends:** *VWAP* provides an average price level, while the *52W H* and *52W L* contextualize current performance within a yearly framework.
- **Market Sentiment:** By comparing the *PREV. CLOSE* with the current day's prices, we can gauge bullish or bearish market sentiments.

This detailed explanation of the data attributes sets the foundation for the subsequent analysis. Understanding each parameter is crucial for interpreting the results and deriving meaningful conclusions from the project.