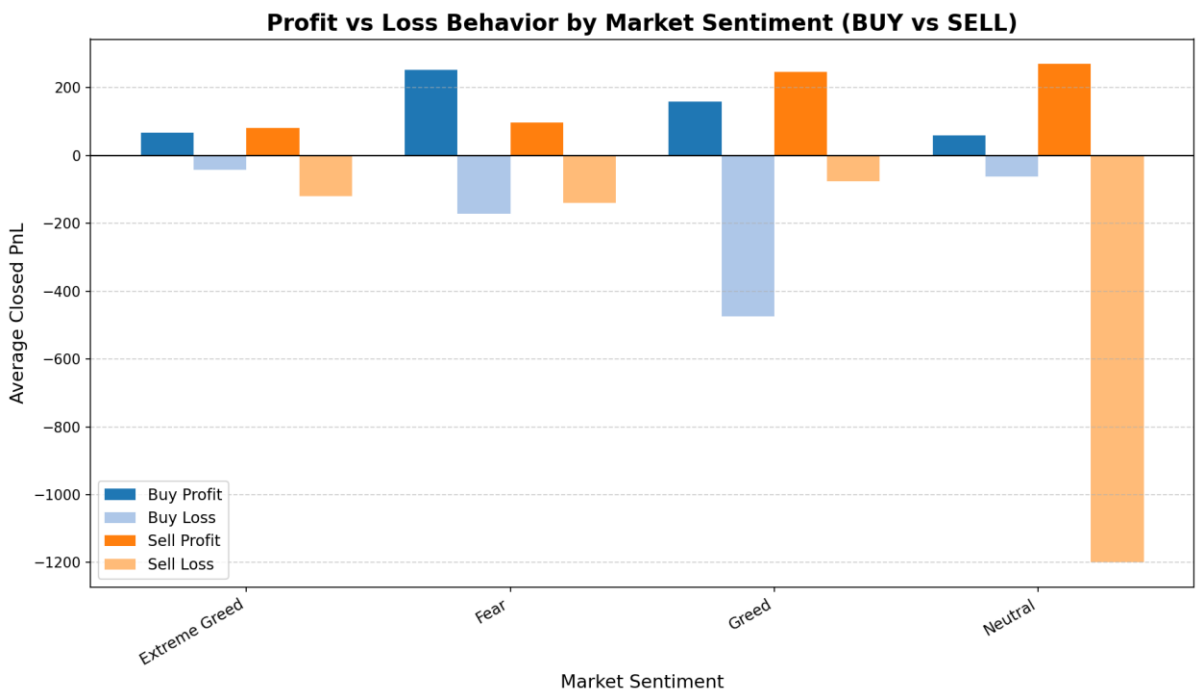
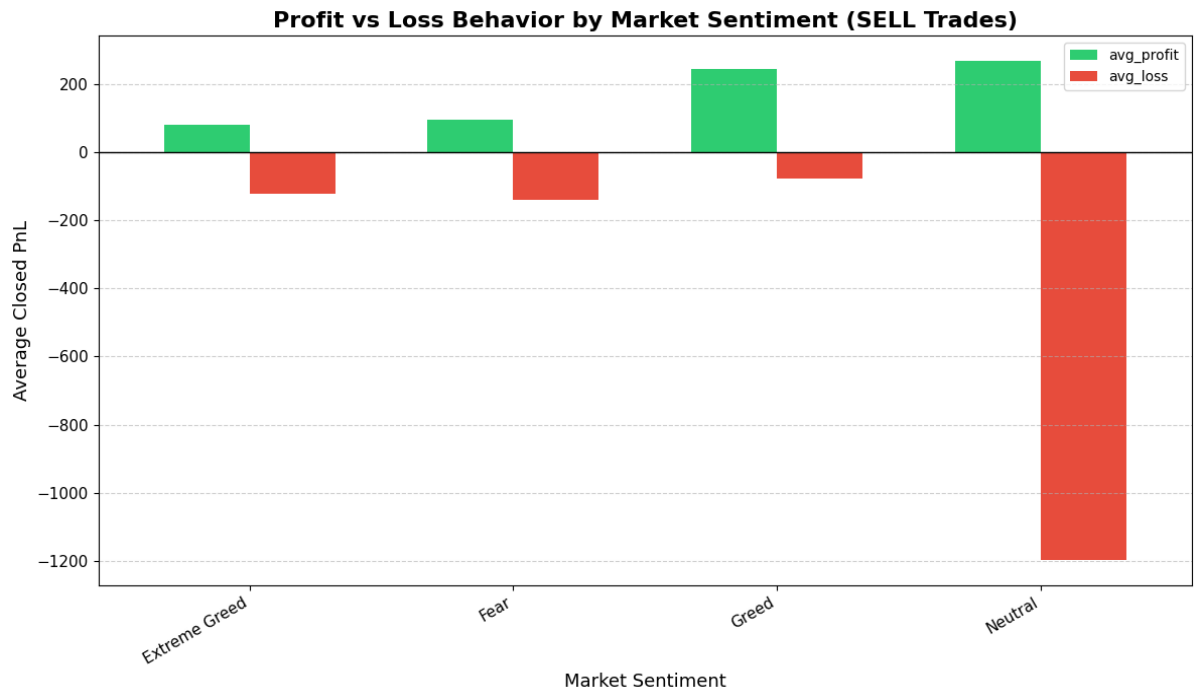
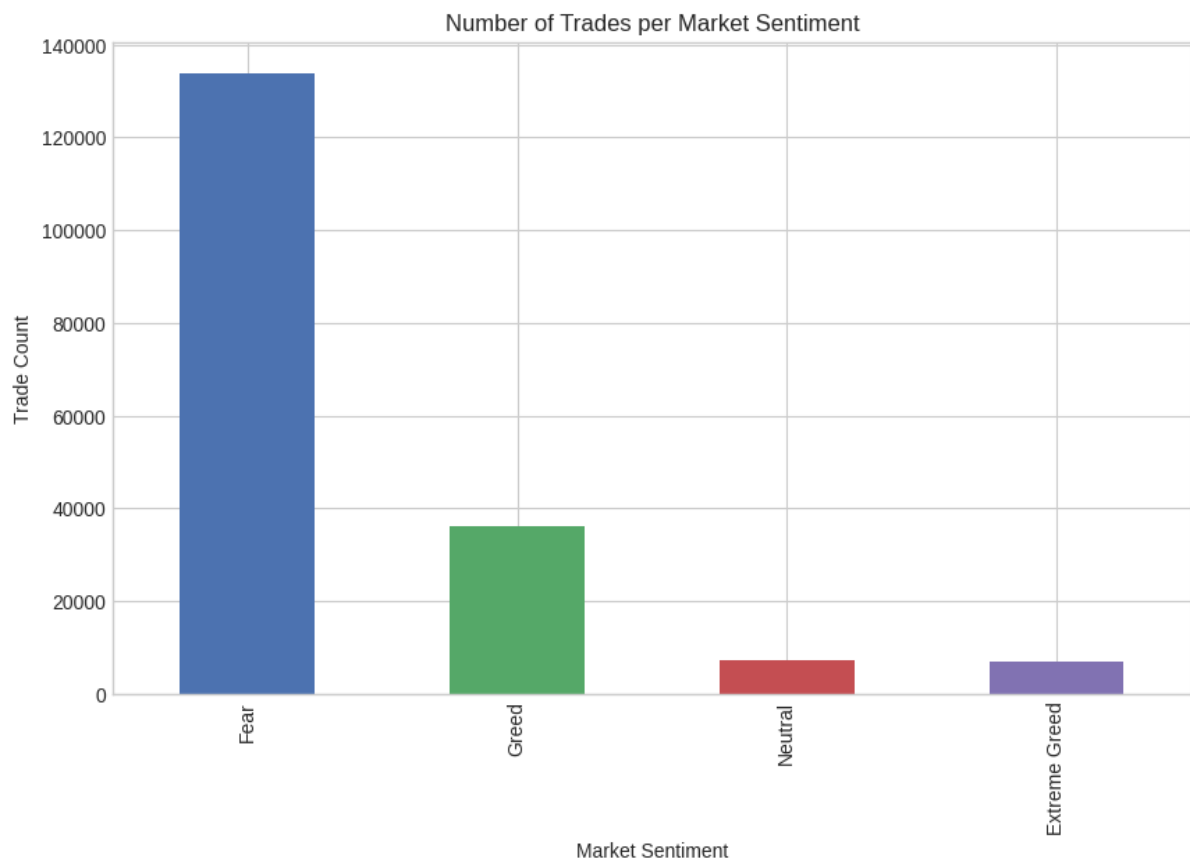
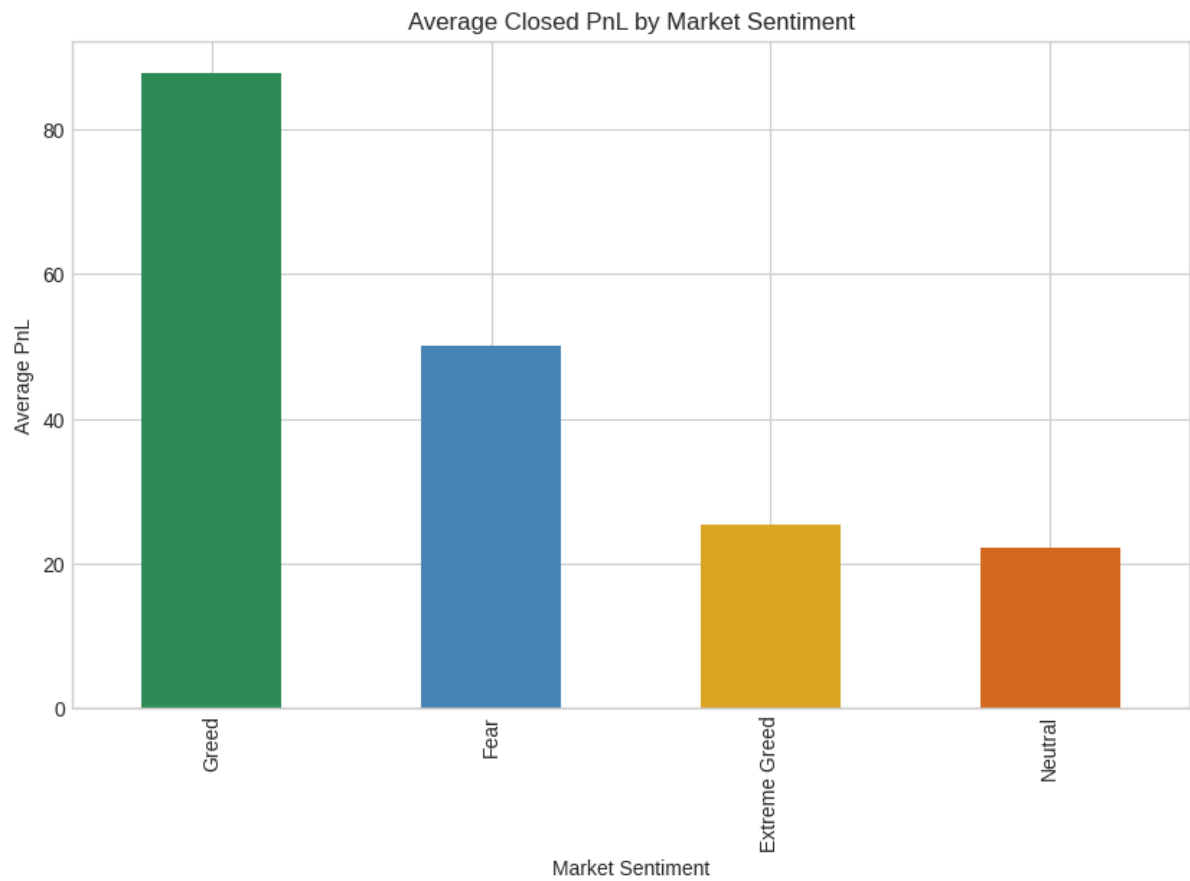
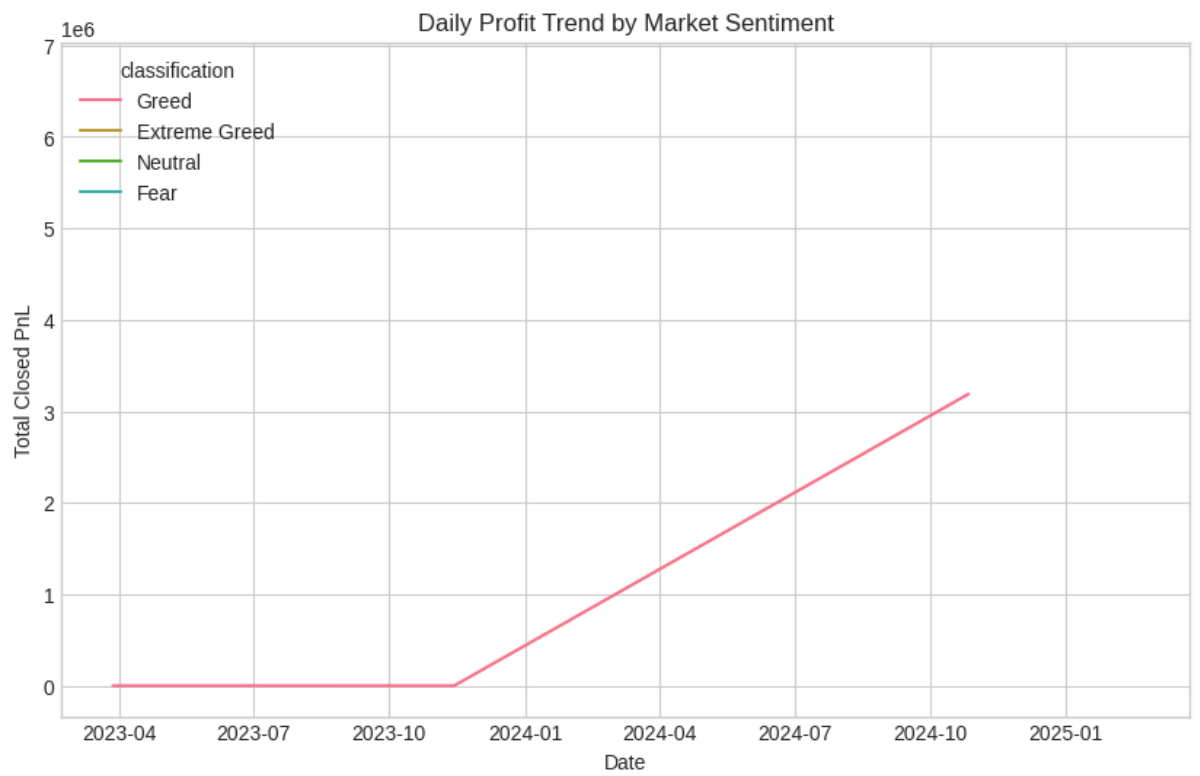
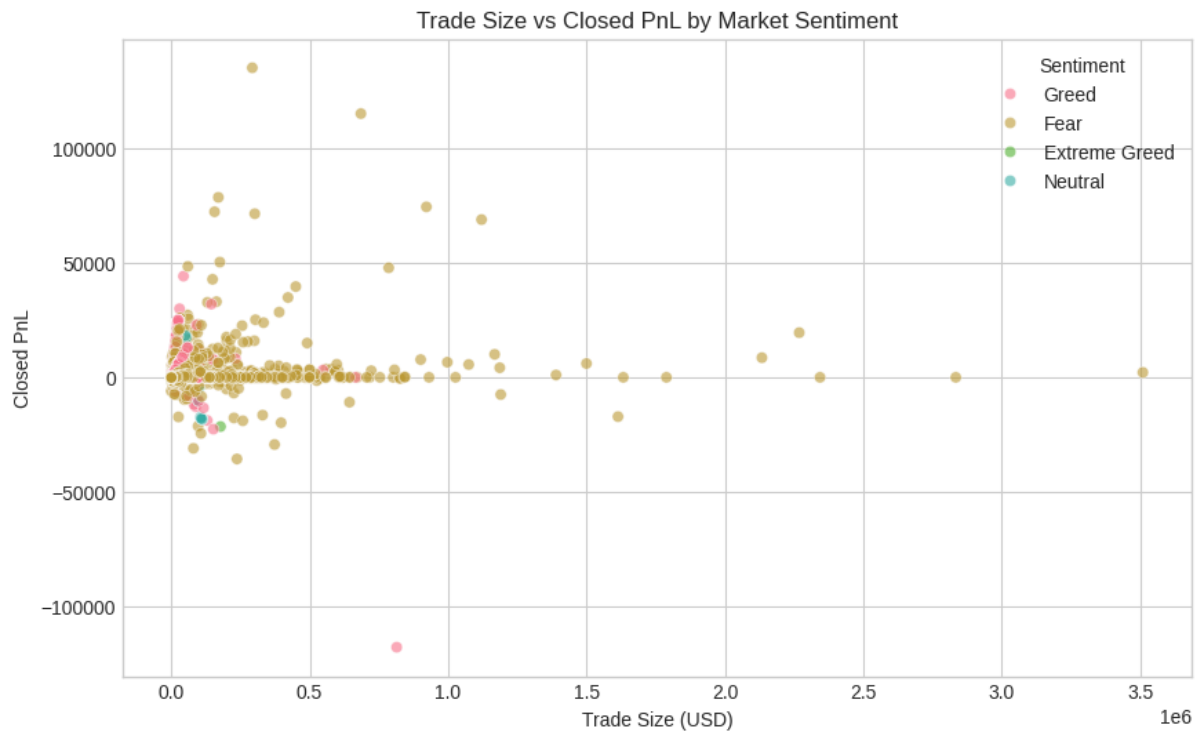


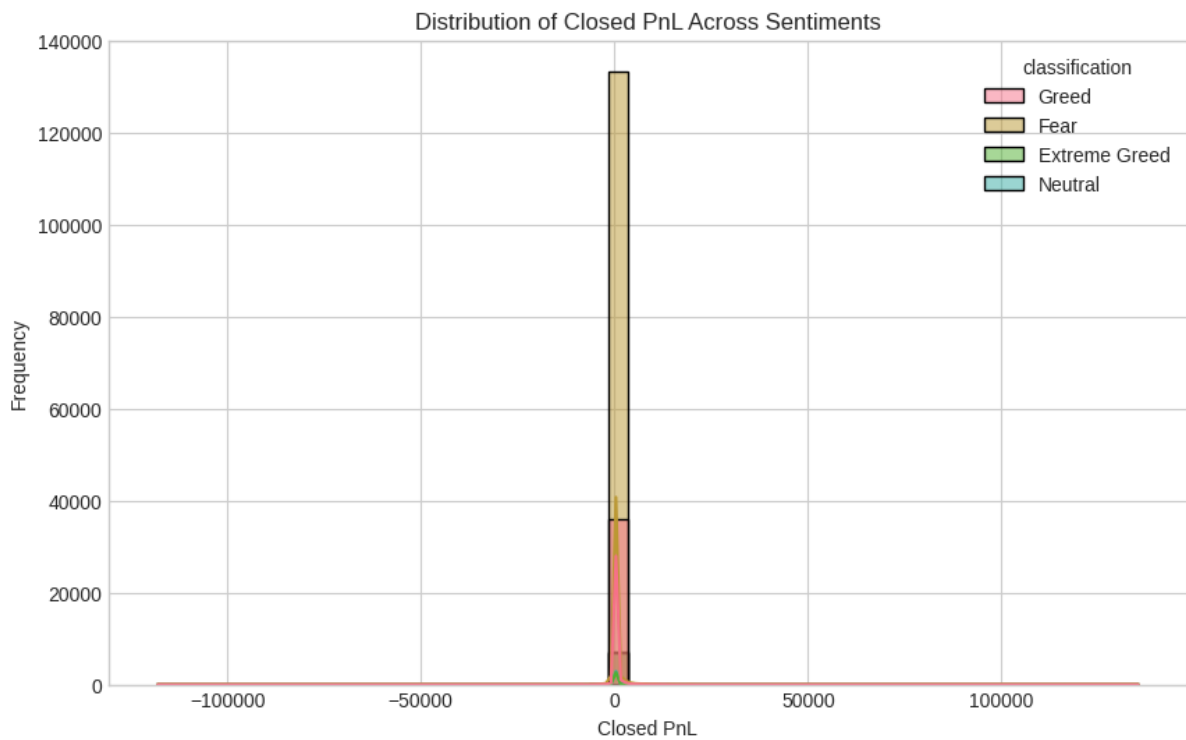
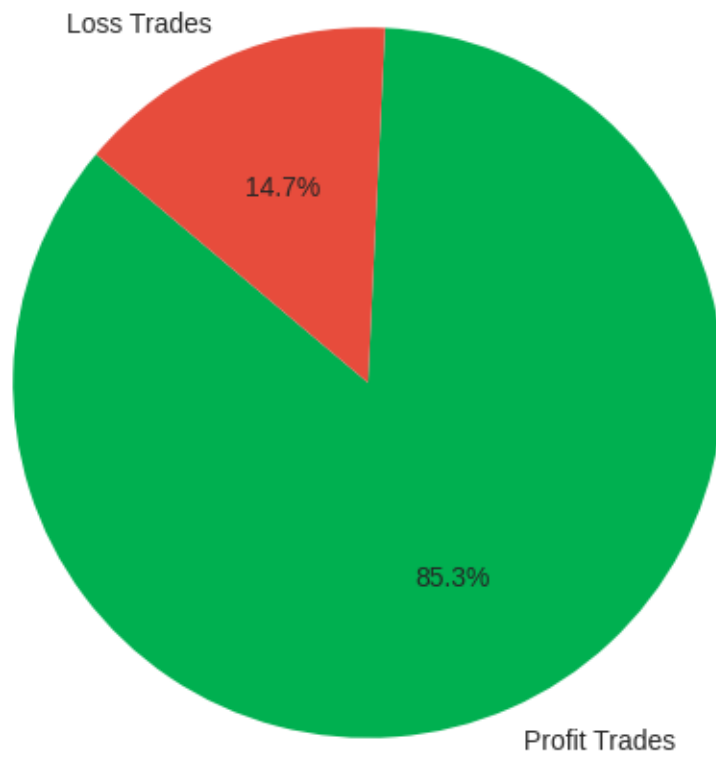
Trading Performance Analysis Report: relationship between trader behaviour and market sentiment using two key datasets.







Overall Profit vs Loss Distribution



This report analyzes trading performance across various market sentiments (Fear, Greed, Extreme Greed, and Neutral), providing a comprehensive overview of trade count, profitability metrics, and volume.

1. Trade Volume and Market Activity

The analysis of trade counts per market sentiment shows a significant **bias toward Fear-driven markets** in terms of trading activity.

- **Dominant Sentiment: Fear** accounts for the vast majority of trades, with approximately 135,000 trades.
- **Next Highest: Greed** follows distantly with around 35,000 trades.
- **Least Active: Neutral and Extreme Greed** sentiments have the lowest trade counts, both around 7,500 trades each.

Market Sentiment	Trade Count (Approx.)
Fear	135,000
Greed	35,000
Neutral	7,500
Extreme Greed	7,500

2. Profitability by Market Sentiment

Analysis of the Average Closed Profit and Loss (PnL) reveals that the highest average profitability is achieved during periods of high optimism.

- **Highest Average PnL: Greed** sentiment yields the highest average PnL, significantly outperforming all other sentiments.
- **Next Highest: Fear** is the second most profitable sentiment on average.
- **Lowest PnL: Neutral and Extreme Greed** show the lowest average PnL.

Market Sentiment	Average PnL (Approx.)
Greed	85
Fear	50
Extreme Greed	25
Neutral	22

The overall distribution of closed PnL is highly concentrated around zero for all sentiments, indicating that a large volume of trades resulted in minimal profit or loss.

3. Overall Profit vs. Loss Distribution

The overall trading results show a high frequency of profitable trades.

- **Profit Trades:** 85.3% of all trades were profitable.
- **Loss Trades:** Only 14.7% of all trades resulted in a loss.

This high percentage of profitable trades, however, must be contextualized with the PnL distribution, where most PnL values are close to zero.

4. Analysis of Trade Size vs. PnL

The scatter plot of Trade Size vs. Closed PnL shows that:

- **Largest PnLs:** The largest profitable trades (highest positive PnL) predominantly occur during **Fear** sentiment.
- **Highest Trade Size:** The single largest trade size, resulting in a significant loss, occurred during a **Greed** sentiment, highlighting the increased risk associated with high-conviction trades in optimistic markets.
- **Clustering:** Most trades, regardless of sentiment, are of small to moderate size and result in PnL close to zero.

5. Profit vs. Loss Behavior by Trade Type (Buy vs. Sell)

Examining the profit and loss behavior provides critical insight into the impact of sentiment on trade direction.

Buy vs. Sell Analysis (Combined)

- **Sell Losses:** Trades during **Neutral** sentiment result in the largest average **Sell Loss**, exceeding -1200. **Greed** sentiment also shows a significant average **Sell Loss** of over -400.
- **Buy Losses:** The largest average **Buy Loss** occurs during **Greed** sentiment, suggesting that buy trades during greedy periods carry a higher risk of significant loss when they go wrong.
- **Profits:** Average profits for both Buy and Sell trades are consistently positive across all sentiments, typically ranging from 50 to 250, but are notably smaller in magnitude than the largest average losses.

Sell Trade Analysis (Isolated)

The Sell trade analysis mirrors the combined data, confirming that the largest average losses on Sell trades occur during **Neutral** sentiment, and the second largest is during **Fear** sentiment.

Key Takeaways and Recommendations

1. **Profitability vs. Volume Divergence:** The system trades most frequently during **Fear**, but achieves the highest *average* PnL during **Greed**. This suggests a contrarian or more selective strategy during Greed could be highly profitable.
2. **Risk Management in Extremes:** **Neutral** and **Greed** sentiments are associated with the largest average losses (Sell Loss during Neutral, Buy Loss during Greed). Implementing tighter stop-loss or smaller position sizes during these sentiments, especially for the high-risk trade directions, is recommended.
3. **Overall Positive Performance:** The 85.3% profitable trades is a strong indicator of a strategy with a high win rate. However, the high average loss figures suggest that a small percentage of losing trades are very large, which is a classic risk profile (many small wins, few large losses).
4. **Trend:** The daily profit trend shows almost all PnL accumulation is from the **Greed** category, especially toward the latter half of the period observed, indicating that profitability is heavily reliant on this sentiment.