I have limited the major analysis to the top 5 performing assets since they cover almost 70% of the trades. The asset specific insights throw the market wide information out of the window, which is evident of the differing characteristic performance of each asset. I've tried my best to list the insights, let me know if you spot any errors.

The top 5 coins by trade count are: HYPE, @107, BTC, ETH, and SOL

Trading Performance Analysis: Sentiment-Based PnL Insights

This document analyzes the Average Daily Profit and Loss (PnL) for the top five most profitable assets in your portfolio, categorized by the Fear & Greed Index classification. The analysis is presented using both a qualitative (semantic) aggregation and a quantitative (mathematical) aggregation, followed by asset-specific trading insights.

I. Aggregated Portfolio Insights

The average performance across the five assets (**HYPE, @107, BTC, ETH, SOL**) reveals a portfolio that thrives on market extremes, particularly during euphoria and panic.

A. Semantic Aggregation (Majority Strategy)

Semantic Aggregation: This approach assesses the sentiment classification that yields the highest PnL for the *largest number of individual assets*.

Classification	Assets Peaking Here	Asset Breakdown	Strategic Insight
Extreme Fear	2 Assets	HYPE, ETH	**Contrarian Strategy (Skilled):** The majority of the portfolio's most critical profits are generated during periods of intense market panic, supporting a strong **"Buy the Blood"** strategy.
Fear	2 Assets	BTC, SOL	**Dip-Buying Strategy (Cautious):** Moderate fear is the sweet spot for the blue-chip assets, indicating optimal entry during quick corrections.
Extreme Greed	1 Asset	@107	**Speculative Strategy (Confident):** Only one asset peaks here, but its high PnL drives the mathematical average (see below).

Conclusion: The **core success** of the portfolio lies in capitalizing on **market fear** (across both Fear and Extreme Fear categories), a strategy that benefits **four out of five** assets.

B. Mathematical Aggregation (PnL Magnitude)

Mathematical Aggregation: This approach calculates the simple average of the Average Daily PnL across all five assets for each sentiment class.

Classification	Aggregate Avg Daily PnL	Strategic Implication
Extreme Greed	**$13,673.44**	**Highest PnL:** Mathematically, the single most profitable sentiment period is **Extreme Greed**.
Extreme Fear	$12,598.01	**Second Highest PnL:** The next most profitable period is extreme panic.
Fear	$11,208.95	**Third Highest PnL:** Moderate fear is still highly profitable.

Conclusion: While only one asset (@107) peaks during **Extreme Greed**, its massive, outlier performance **skews the overall mathematical average**, making **Extreme Greed** the highest-PnL period in absolute terms. The portfolio relies on this short-burst euphoria for the largest chunk of its profit.

II. Asset-Specific PnL Insights

The table below translates the final PnL values into specific buy/sell signals, revealing the optimal market sentiment for trading each asset.

Asset	Best PnL Sentiment	PnL Value	Worst PnL Sentiment	PnL Value	Trading Strategy & Insight
HYPE	Extreme Fear	**$43,825.80**	Greed	$4,056.28	**Aggressive Contrarian.** Profits peak exclusively during maximum panic. The strategy is to **Buy** aggressively into capitulation.

Asset	Best PnL Sentiment	PnL Value	Worst PnL Sentiment	PnL Value	Trading Strategy & Insight
@107	**Extreme Greed**	**$60,261.18**	Extreme Fear	**-$12,371.40**	**Speculative Leader.** Thrives only on market euphoria, confirming a high-risk, high-reward trend-following strategy. **Strong Buy** during peak Greed, and **Strong Sell** during Extreme Fear.
BTC	**Fear**	**$8,618.74**	Greed	$1,121.12	**Dip-Buyer.** PnL is highest on moderate dips (**Fear**). The strategy is to **Buy** when others are slightly nervous, rather than waiting for full panic (**Extreme Fear** PnL is low).
ETH	**Extreme Fear**	**$19,594.30**	Extreme Greed	-$538.67	**Pure Contrarian.** The most profitable strategy is to **Buy** during maximum panic and **Sell/Avoid** when the market is euphoric, as PnL turns negative on Extreme Greed days.
SOL	**Fear**	**$17,657.01**	Extreme Greed	$1,019.35	**Fast-Bounce Trader.** Like BTC, the profit window is when the market is **Fearful** (moderate dip). The strategy maximizes profits by entering quickly during corrections, as gains plummet when euphoria sets in.

Key Strategic Note: The most dangerous time for the **entire portfolio** is when market sentiment is at an **Extreme**, as two different assets incur their largest losses during the two different extremes: **@107** on Extreme Fear and **ETH** on Extreme Greed. Successfully trading this portfolio requires a highly specialized approach for each asset based on the current sentiment.

Now let's introduce a very interesting piece of information - the boxplot.

The boxplot tells us :

- that "Extreme Greed" has the highest median PnL value, which would suggest that success is broadly distributed—the typical trade in the whole dataset is reliable and moderately profitable during Greed.

- "Fear" has the highest mean PnL but the lowest median, a positive skew. Which would suggest a contrarian "Buy the Blood" is high-risk, high-reward and requires skillful timing to avoid the low-median performance.

But, @107 is the only asset profiting from Extreme Greed.

Combing the earlier analysis with the information from boxplot(dataset wide) reveals a major decoupling:

- "While the dataset-wide boxplot metrics (high median in Extreme Greed, skewed distribution in Fear) generally support a **contrarian trading hypothesis** (sell greed, buy fear), **Asset @107** exhibits a completely inverse and highly profitable relationship."
- "For **Asset @107**, Extreme Greed serves as a reliable **Confirmation Signal** to buy, rather than the typical contrarian signal to sell."

Data Point	Interpretation	Strategy Implication
Dataset Boxplot: Extreme Greed has the **Highest Median** score/magnitude.	The typical experience across **the entire market/dataset** during Extreme Greed is one of highly elevated activity (e.g., high volatility, large price swings, general market euphoria).	**General Market Wisdom:** Extreme Greed is usually a time to be cautious or sell (contrarian signal), as the market is statistically "overbought."
Dataset Boxplot: Fear has the **Highest Mean but Lowest Median** score.	The typical experience during Fear is low, but there are a few **extreme, high-magnitude negative outliers** (panic selling events) that drag the average down.	**General Market Wisdom:** Extreme Fear is often the best time to buy (contrarian signal), as the market is statistically "oversold."
Asset Specific: Extreme Greed was **ONLY profitable for Asset @107**.	This specific asset **defies the contrarian market rule**. It does *not* follow the general market trend of topping out during greed. For **Asset @107**, Extreme Greed is the most reliable (or only) profitable environment.	**Specific Trading Signal:** Buy Asset @107 when the market is in an Extreme Greed state.

Kindly let me know if I made any mistakes in the analysis, which is laughably likely.

I'll also list the market wide insights derived from the boxplot, which you may or may not go through.

Box Plot interpretations:-

1. Baseline and Success Threshold (Q1 and Q3)

- **Q1 Insight (The Breakeven Threshold):** For **all** sentiment classifications, the **25th percentile (Q1) is $0.00**.
  - **Finding:** This is a crucial strategic finding. It means that on *any given day* and *regardless of sentiment*, **at least 25% of active accounts** make $0.00 or less (i.e., they are losing money or breaking even). The trading landscape is consistently difficult for a quarter of the population.
- **Q3 Insight (The Outperformer Threshold):** The 75th percentile (Q3) is the point where an account can be considered an "outperformer" for that day.
  - **"Extreme Fear"** has the **highest Q3 at $3,381.32**. This means that the top 25% of traders during periods of panic/volatility are earning the most, on average, among the quartiles. This reinforces that while this day is risky for most, it is the most rewarding for the top performers.

2. Volatility and Dispersion (Interquartile Range - IQR)

The **IQR** (the length of the box, or the Q3 - Q1 range) measures the performance spread of the middle 50% of accounts. It is a good proxy for the volatility of performance among the average trader.

- **Highest Dispersion (IQR): Extreme Fear** ($3,381.32) and **Extreme Greed** ($2,385.43).
  - **Finding:** Trading during extreme sentiments (both fear and greed) is a **high-variance activity**. The middle 50% of traders have a large spread in their outcomes, indicating that market extremity forces wider PnL results, good or bad.
- **Lowest Dispersion (IQR): Neutral** ($1,321.97) and **Greed** ($1,319.22).
  - **Finding:** Trading during moderate sentiments is a **low-variance activity**. The outcomes are tightly clustered, confirming that these are low-reward environments, but also low-risk for the middle 50% of traders.

3. Skewness (Mean vs. Median)

The difference between the Mean and Median indicates the skew of the distribution, which highlights the impact of extreme winners (outliers).

- **Most Extreme Positive Skew (Highest Disparity): Fear** (Mean: $5,328.82 vs. Median: $107.89).

- **Finding:** The Mean is **50 times greater** than the Median. This confirms that **"Fear"** is the most **polarizing** environment. It's terrible for the average trader (lowest median), but the small, successful minority on that day are capturing colossal profits, pulling the average to the highest level.
- **Lowest Skew (Most "Normal" Distribution): Extreme Greed** (Mean: $5,161.92 vs. Median: $418.32).
  - **Finding:** While still positively skewed, the ratio of Mean to Median is the lowest (approx 12.3). This indicates that the profits on "Extreme Greed" days are more **broadly distributed** among successful traders, which supports the "easy trend-following" strategy for the average participant.

4. Universal Risk Baseline

Baseline Failure Rate: For **every** sentiment classification, the **25th percentile Q1 of daily PnL is $0.00**. This means that **at least 25% of accounts** are breaking even or losing money every single day, regardless of the market environment. This highlights the inherent difficulty of consistent trading.