

Assignment 4

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Stock Used: ICICI Bank

Strategy:

Description:

The strategy utilizes the hammer candlestick pattern in combination with the Keltner channel bands to identify potential buy and sell signals in the market. A hammer pattern typically indicates a potential reversal in price direction. When a hammer pattern occurs near the upper band of the Keltner channel, it suggests that the price might be overbought, signaling a possible sell opportunity. Conversely, a hammer pattern near the lower band indicates that the price might be oversold, suggesting a potential buy opportunity.

Effectiveness of the Strategy:

The strategy capitalizes on the hammer candlestick pattern's potential reversal signals and combines them with the Keltner channel bands to determine overbought and oversold levels. The upper band of the Keltner channel serves as a dynamic resistance level, while the lower band acts as a dynamic support level. By looking for hammer patterns near these bands, the strategy aims to identify instances where the price might reverse from overbought or oversold conditions. In suitable market conditions, this approach can provide effective signals for capturing profitable trading opportunities.

Drawbacks & Further Optimisations:

- 1) The definition of Hammer Pattern and the proximity to the bands can be subjective, as it depends on individual interpretations.
I have taken the thresholds as 1% in case of Upper Keltner Channel and 5% in case of Lower Keltner Channel after testing for some possible values, as it gives better metrics.

2) False Signals can Occur.

Not all hammer patterns near the bands will result in successful reversals. Additional confirmation indicators or filters can be used to minimize false signals.

Final Evaluation:

Max Drawdown: -0.19447295758947347

Sharpe Ratio: 0.48814097726360983

Cumulative Return: 1.3449016178512996