Introduction:

This algorithm was developed within the MQL5 framework using C++ and is designed to calculate the highest and lowest prices of a specified symbol or pair over a defined time period.

At the end of each time period, the algorithm records the highest and lowest prices. When the price breaks through either of these levels, a trade is initiated in the corresponding direction. For example, if the price exceeds the period's high, a long position is entered; if it breaks the period's low, a short position is taken.

The algorithm also calculates take-profit and stop-loss levels based on the price range from which the highs and lows were determined.
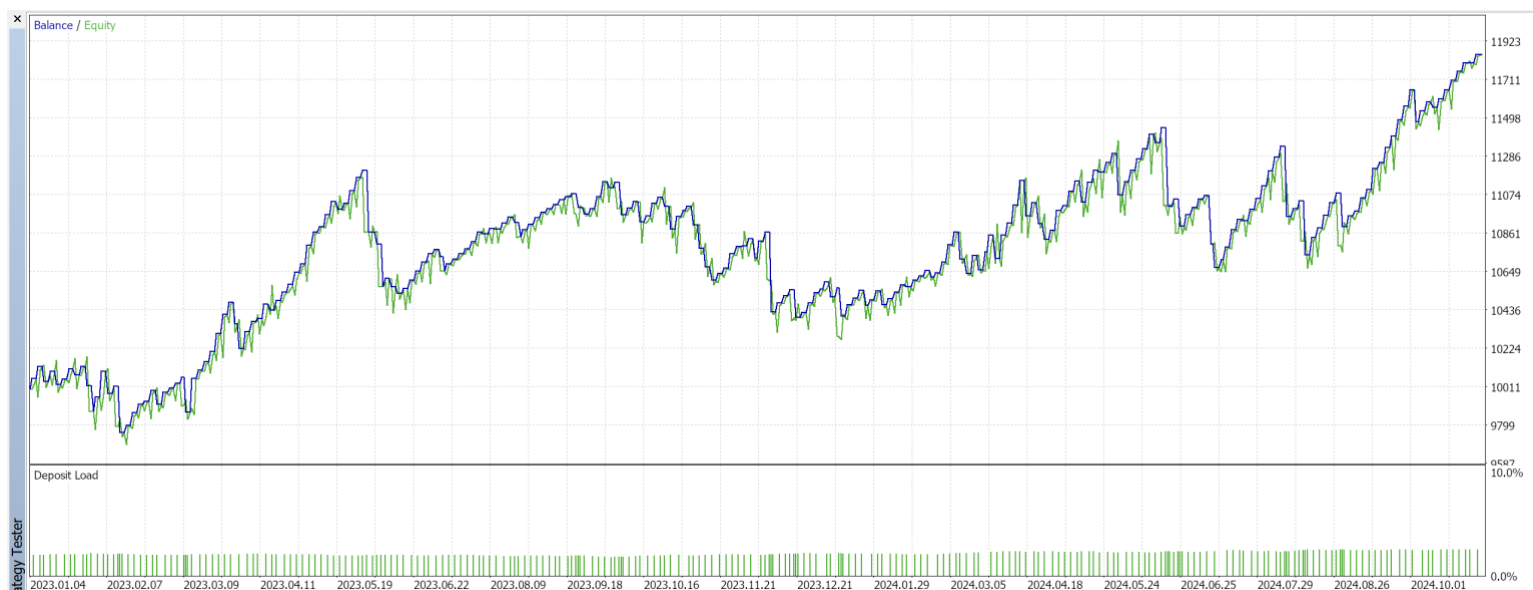
Results:

Backtesting over a two-year period produced the following outcomes:

- A return of 18.5% with a maximum drawdown of 7.26%
- Winning trades were achieved on over 71% of long positions and over 72% of short positions.

Proposed Improvements:

I would like to add a trailing stop loss that initiates at a set percentage of the range from the entry price. Once a position becomes profitable, the algorithm would adjust the stop loss to follow the price at a specified distance.

✓ History Quality	100%				
✓ Bars	43281	Ticks	77786854	Symbols	1
✓ Initial Deposit	10 000.00				
✓ Total Net Profit	1 847.40	Balance Drawdown Absolute	241.90	Equity Drawdown Absolute	305.80
✓ Gross Profit	9 700.30	Balance Drawdown Maximal	813.70 (7.26%)	Equity Drawdown Maximal	893.40 (8.00%)
✓ Gross Loss	-7 852.90	Balance Drawdown Relative	7.26% (813.70)	Equity Drawdown Relative	8.00% (893.40)
✓					
✓ Profit Factor	1.24	Expected Payoff	7.60	Margin Level	4201.52%
✓ Recovery Factor	2.07	Sharpe Ratio	2.41	Z-Score	0.88 (62.11%)
✓ AHPR	1.0007 (0.07%)	LR Correlation	0.74	OnTester result	0
✓ GHPR	1.0007 (0.07%)	LR Standard Error	284.64		
✓					
✓ Total Trades	243	Short Trades (won %)	110 (71.82%)	Long Trades (won %)	133 (72.93%)
✓ Total Deals	486	Profit Trades (% of total)	176 (72.43%)	Loss Trades (% of total)	67 (27.57%)
✓	Largest	profit trade	186.60	loss trade	-441.50
✓	Average	profit trade	55.12	loss trade	-117.21
✓	Maximum	consecutive wins ($)	11 (755.60)	consecutive losses ($)	4 (-641.10)
✓	Maximal	consecutive profit (count)	755.60 (11)	consecutive loss (count)	-641.10 (4)
✓	Average	consecutive wins	3	consecutive losses	1

✓ Correlation (Profits,MFE)	0.54	Correlation (Profits,MAE)	0.84	Correlation (MFE,MAE)	0.2246