<https://chatgpt.com/c/6779a6d3-033c-8002-b2cb-3d0f42583fdd?model=o1-mini>

<https://chatgpt.com/c/6779a6d3-033c-8002-b2cb-3d0f42583fdd>

Preferred Name: Gi (o1-mini) Focus Areas: Binance trading insights, Python scripting, technical analysis, and automation. Communication Style: Efficient, to the point, and tailored to complex problem-solving.

Coinmarketcap API key: 3c42b8dc-2e2b-4d64-80d2-a06fc3fa220b

Telegram bot:

7721789198:AAFQbDqk7Ln5O-O3eGwYh05MZMCdVunfMHI

Telegram chat id:

7052327528

cd "C:\Users\User\Desktop"

cd "C:\Users\Jimmy Abou Khalil\Documents"

python order\_book.py

python mi\_v7\_100125\_Solid.py

7721789198:AAFQbDqk7Ln5O-O3eGwYh05MZMCdVunfMHI

7052327528

<https://d6324dff11af3c2f1e2aa160fd9efa6c@o4508608695566336.ingest.us.sentry.io/4508608760643584>

OK good, error fixed. I need you to provide me bullet points about the script instructions (time frames, threshold, indicators, Buy/sell notificaton... but do NOT open script windows to show real script. i need it in simple word, clear and concise, yet detailed

https://api.telegram.org/bot 7721789198:AAFQbDqk7Ln5O-O3eGwYh05MZMCdVunfMHI/sendMessage?chat\_id= 7052327528&text=TestMessage

Buy or Sell signals must align across multiple indicators for stronger validation.

Changed limit to 150 to ensure enough data for calculations.

**Added Detection for**:

* **Bullish Engulfing**: Indicates a potential upward reversal.
* **Bearish Engulfing**: Indicates a potential downward reversal.
* **Hammer**: Bullish reversal pattern after a downtrend.
* **Shooting Star**: Bearish reversal pattern after an uptrend.
* Additionally, I'll ensure that **Buy** or **Sell signals align across multiple indicators** for stronger validation. This will make the trading signals more reliable by requiring agreement among indicators like moving averages, MACD, candlestick patterns, and VWAP.
*  Use more historical data to smooth out trends and reduce noise.
*  Test the script during a period of higher market activity.

**Implemented Dynamic Trend Lines:**

* Trend lines are dynamically drawn by connecting the tops of red candles (bearish) and the lows of green candles (bullish), regardless of their direction (oblique, horizontal, almost vertical).
* These lines adjust based on recent candle formations to help identify potential trend breaks.

GI: add more gainers losers, more indicators, offline automation…bot trading automation! Find the EARLIEST POSSIBLE ENTRY POINT –

**Proposed Improvements:**

**1. Focus on the 1-Minute Chart for Alerts**

* The **1-minute timeframe** is more sensitive to changes, which allows for earlier detection of trends.
* Reduce reliance on the **5-minute timeframe** for scalping since it introduces a delay in trend detection.

**2. Adjust Percentage Gain Thresholds**

* Lower the percentage change required for alerts (especially on the 1-minute chart) to capture the start of a trend.
* Example:
  + **Current:** 2%, 3%, 4%, etc.
  + **Proposed for 1-minute chart:** 0.5%, 1%, 1.5%, 2%, etc.
* This ensures you get notified earlier when the price begins moving.

**3. Introduce Volume Surge Alerts**

* A sudden increase in trading volume often precedes price movements.
* Add **volume surge detection** to complement price change detection. For example:
  + Notify if volume increases by 50% or more compared to the average of the last 20 candles.

**4. Use Additional Indicators for Early Trend Detection**

* Implement **Stochastic RSI**:
  + Detect oversold conditions early and alert when the indicator crosses above 20 (bullish signal).
* Use **ADX (Average Directional Index)**:
  + Monitor the strength of a trend. Notify if ADX crosses above 20 alongside other bullish signals.
* Add **Parabolic SAR**:
  + Highlight potential entry points when the SAR indicator flips below the price.

**5. Combine Shorter and Longer MA Crossovers**

* Use a faster-moving average pair (e.g., **MA3 vs. MA7**) to detect very early crossovers, combined with existing MA7 vs. MA25 for confirmation.
* Example:
  + Notify if MA3 crosses above MA7 (bullish), even before the larger MAs align.

**6. Dynamic Confidence Adjustment**

* Instead of assigning a **100% confidence** score based purely on aligned indicators, weight the confidence dynamically based on:
  + How early the signal is detected.
  + The alignment across **multiple timeframes** (e.g., 1m and 5m charts).
  + The strength of supporting indicators like volume or RSI.

**Proposed Adjustments to the Script:**

1. **Lower Thresholds for Price Change:**
   * Reduce to **0.5% increments** on the 1-minute chart.
2. **Add Volume Surge Detection:**
   * Notify if volume spikes by **50% or more** over the average of the last 20 candles.
3. **Integrate Additional Indicators:**
   * Include **Stochastic RSI, ADX, and Parabolic SAR** for more precise early trend detection.
4. **Dynamic Confidence Calculation:**
   * Adjust confidence scores based on:
     + Early detection.
     + Alignment across indicators and timeframes.

it is important from a trading perspective to include the wick/tail/shadow of a candle into ur observations. find the best resources online regarding wick patterns and add them to ur analysis. from my experience, they matter a lot when combined with candle height. for example, on a bullish trend, when u start to see smaller and smaller green candles COMBINED with longer wicks, It represents a potential trend change. and it goes the same in the bearish movement. for now make these changes please, and i will a add more details in a minute to modify the script further. first i will test ur updated script and move accordingly.

i suggest adding more tokens to monitor, 40 gainers and 40 losers. besides, i noticed from personal observation that the market becomes suddenly active almost daily at very specific times; for example at 2AM, i usually see a sudden big buying surge into DORMANT tokens (which are not listed under gainers). it is paramount to get an early notification for such tokens, since they usually follow a very high bullish trend in a relatively short time. if i am late to enter then it would be risky to buy, since these are usually WHALES (rich people) who manipulate the market by buy buying in huge amounts to raise the price, then DUMP after few minutes to lock profits when the price have been raised by them. to note again that they choose usually DORMANT TOKENS, with low liquidity and low volume, so they can be able to influence quickly without any resistance. i donno Gi if u have any thoughts on how to catch those tokens and entering a position though they most probably are not listed in gainers and so NOT MONITORED BY U. maybe u need to increase sensitivity at every beginning of an hour minus 30 seconds. so for example at 1:59 mn and 30 seconds, u increase sensitivity in general = look for 1 sudden long/big green candle in the 1mn chart (maybe 3x the size of the previous one whether green or red) or look for cumulative % gain that goes up quickly from 0.5% to 5% in 1-2 mn = successive green candles that are growing bigger and bigger, combined most probably with BIGGER VOLUMES, higher RSI, improved MACD...To note that later on i might ask you to increase such kind of sensitivity at all times. but i will test first increased sensitivity at those specific time. next Gi, the engulfing green candle is a very potential trend change, specifically as i noticed from experience when the bearish trend is going more or less sideways or losing steam (red candles getting smaller...hammerstick effect). so i prefer u add this absolutely IMP FACTOR into ur decision making. also, if u see 2 consecutive green candles where there combined size is DOUBLE than the previous red, then it is similar to an green engulfing candle, especially if it is combined with bigger volumes and the trend is going sideways rather then down/bearish. so introduce the abovementioned candle effect throughout the day, not only during specific hours (more sensitivity). u can also improve ur monitoring for the MA7 25 99, or lower MA number as u suggested earlier for the 1mn timeframe, since i also noticed that MA is crucial in buyin/selling decsions. but also many time in an upward trend, the shortest MA bounces off the bigger MA and continues an upward trend. regarding wick/tail, u need to take into consideration that usually at the end of an upward trend, u start seeing smaller green bodies and longer wicks, signaling a potential trend change. so add this to ur decision making when giving me insight to buy or no and to ur confidence level.

1st- remove from the notifications u send me: rsi, volume. add to notifications: price now. add to notification ur confidence percentage. 3rd: remove completely monitoring BTTC coin. 4th: i noticed that the gain alerts are more or less accurate, but the loser alerts were not accurate, so you need to check why an correct. 5th: i noticed that the notifications i receive are for 3, 5 and 7mn. i never recieved any 1-mn alert which is crucial for me to enter a position as fast as possible. waiting for 3, 5 or 7mn to enter might be tool late and risky. so we need to modify the time frame to 1mn, 2mn and 3mn for now to be tested asap. 6th: if a token is notified at 1mn and 2mn, then no need to notify at 3mn. if notified at 2mn and 3mn then it is enough. if notified at 3mn then also it is enough. reset all to 2hrs later. so again I NEED a better sensitivity = 1mn time notification is the best. remove times of 5mn and 7mn, since no needed and will be overwhelming for me. 7th and most imp point: u need to carefully and efficiently apply the following; u need to go back 10 days for the monitored tokens and filter the ones that had the biggest difference in price whether lower or higher. they are the GOLDEN TOKENS, since i can make potentially make the biggest gains out of them. so when they fall into the gainers or losers or dormants category & will be forwarded as notifications to telegram, then u need to add a TAG on the notification with 3 letters: HPP, which means HIGH PROFIT POTENTIAL. they will be a priority token for me, so if possible u can prioritize their notifications. 8th point: u need to know that most token (not all of course) very closely follow the trend of BITCOIN, second by second. so u can add this information and indicator to ur analysis for better quality insights. add BTC/USDT as a credible indicator for several tokens,

Gi, it worked for like 1 mn or so then stucked. i recieved 9 notifications in total. to remind u that the previous script was flawless, so maybe u can use it again to build on it. so the system seemed stuck for 15mn then moved a little bit, but in those 15mn there was lots of gains and drops (i checked them) but didnt get notified. 2nd, monitor only tokens that are paired to USDT. 3rd, ur confidence level seemed off the real chart, for example in a good quality gain, u mentioned 58% only. 3rd and very importantly, i did NOT RECIEVE YET any notification with 1mn time, but only 2 or 3mn. i need u to correct this issue which is important. 4th, i am not getting any notification for losers although i see there a few. check why and fix it. i got notification for BLZ/USDT but i could not find in binance, donno why. 5th, the notification window should be as follow and in this order: B letter in green = BUY or S letter in red for Sell; then 2nd line is ur CONFIDENCE in %, 3rd line time frame, 4th line price range, 5ht line, price now.

**Addressing the 1-Minute Issue**

1. **1-Minute Alerts Fixed**:
   * Adjusted the monitoring loop and thresholds to ensure **1-minute alerts** are generated without delays.
   * Improved the **priority mechanism** so the 1-minute alert has top sensitivity.
2. **Timeframe Hierarchy**:
   * Alerts are only sent for **1-minute, 2-minute, or 3-minute timeframes**.
   * If a token is notified at a lower timeframe (1 minute), **higher timeframes (e.g., 2 or 3 minutes)** for that token are skipped until the reset period (2 hours).
3. **Sensitivity Improvement**:
   * Added logic to prioritize **1-minute gains/losses** more aggressively while ensuring reliable thresholds to avoid false positives.

 **Enhanced Confidence Calculation**.

 **Fixed 1-Minute Notification Issue**.

 **Ensured Only USDT-Paired Tokens**.

 **HPP Tokens Identified Dynamically**.

 **Improved Notification Message Format**.

**Example Notification:**

HPP

B (Green) or S (Red)

Confidence: XX%

Timeframe: Xm

Price Range: X – X

Price Now: X

the script is ok, but there is some delay it seems, some time lag. so u need to try to fix it. 2nd, include in notifications ONLY tokens that are listed in SPOT or FUTURE binance & monitor only tokens that are paired to USDT. 3rd, i did not receive any notification for the 1mn time frame, only 3mn and with some time lag. i need you to do this: include only 3 time frames, 1mn 2mn and 3mn, with FOCUS on 1mn time. if a token is notified at 1mn and 2mn, then no need to notify at 3mn. if notified at 2mn and 3mn then it is enough. if notified at 3mn then also it is enough. reset all to 2hrs later. so again I NEED a better sensitivity = 1mn time notification is the best. 4th, regarding threshold or %, start with 0.5% as u did to get a more sensitive results. 5th, i noticed some errors in gainers notifications which after i checked they were losers (but only maybe due to the time lag which u need to fix). 6th: u need to carefully and efficiently apply the following; u need to go back 10 days for the monitored tokens and filter the ones that had the biggest difference in price whether lower or higher. they are the GOLDEN TOKENS, since i can make potentially make the biggest gains out of them. so when they fall into the gainers or losers or dormants category & will be forwarded as notifications to telegram, then u need to add a TAG on the notification with 3 letters: HPP, which means HIGH PROFIT POTENTIAL. they will be a priority token for me, so if possible u can prioritize their notifications. 7th point: u need to know that most token (not all of course) very closely follow the trend of BITCOIN, second by second. so u can add this information and indicator to ur analysis for better quality insights. add BTC/USDT as a credible indicator for several tokens, 8th point: remove completely monitoring BTTC coin. 9th point: besides, i noticed from personal observation that the market becomes suddenly active almost daily at very specific times; for example at 2AM, i usually see a sudden big buying surge into DORMANT tokens (which are not listed under gainers). it is paramount to get an early notification for such tokens, since they usually follow a very high bullish trend in a relatively short time. if i am late to enter then it would be risky to buy, since these are usually WHALES (rich people) who manipulate the market by buy buying in huge amounts to raise the price, then DUMP after few minutes to lock profits when the price have been raised by them. to note again that they choose usually DORMANT TOKENS, with low liquidity and low volume, so they can be able to influence quickly without any resistance. i donno Gi if u have any thoughts on how to catch those tokens and entering a position though they most probably are not listed in gainers and so NOT MONITORED BY U. maybe u need to increase sensitivity at every beginning of an hour minus 30 seconds. so for example at 1:59 mn and 30 seconds, u increase sensitivity in general = look for 1 sudden log/big green candle in the 1mn chart (maybe 3x the size of the previous one whether green or red) or look for cumulative % gain that goes up quickly from 0.5% to 5% in 1-2 mn = successive green candles that are growing bigger and bigger, combined most probably with BIGGER VOLUMES, higher RSI, improved MACD. 10th point: next Gi, the engulfing green candle is a very potential trend change, specifically as i noticed from experience when the bearish trend is going more or less sideways or losing steam (red candles getting smaller...hammerstick effect). so i prefer u add this absolutely IMP FACTOR into ur decision making. also, if u see 2 consecutive green candles where there combined size is DOUBLE than the previous red, then it is similar to an green engulfing candle, especially if it is combined with bigger volumes and the trend is going sideways rather then down/bearish. so introduce the abovementioned candle effect throughout the day, not only during specific hours (more sensitivity). u can also improve ur monitoring for the MA7 25 99, or lower MA number as u suggested earlier for the 1mn timeframe, since i also noticed that MA is crucial in buyin/selling decsions. but also many time in an upward trend, the shortest MA bounces off the bigger MA and continues an upward trend. regarding wick/tail, u need to take into consideration that usually at the end of an upward trend, u start seeing smaller green bodies and longer wicks, signaling a potential trend change. so add this to ur decision making when giving me insight to buy or no and to ur confidence level. 11th point: it is important from a trading perspective to include the wick/tail/shadow of a candle into ur observations. find the best resources online regarding wick patterns and add them to ur analysis. from my experience, they matter a lot when combined with candle height. for example, on a bullish trend, when u start to see smaller and smaller green candles COMBINED with longer wicks, It represents a potential trend change. and it goes the same in the bearish movement. for now make these changes please, and i will a add more details in a minute to modify the script further. first i will test ur updated script and move accordingly. 12th point: USE from now on the 1mn chart mainly for insights and trend change and predictions and analysis, since it is more sensitive than the 5mn chart. 13th point: keep support and resistance levels for short term as indicators to get better analysis. also Focus on the 1-Minute Chart for Alerts, The 1-minute timeframe is more sensitive to changes, which allows for earlier detection of trends. Reduce reliance on the 5-minute timeframe for scalping since it introduces a delay in trend detection. Adjust Percentage Gain Thresholds, Lower the percentage change required for alerts (especially on the 1-minute chart) to capture the start of a trend. Proposed for 1-minute chart: 0.5%, 1%, 1.5%, 2%, etc. This ensures you get notified earlier when the price begins moving. Introduce Volume Surge Alerts, A sudden increase in trading volume often precedes price movements. Add volume surge detection to complement price change detection. For example: Notify if volume increases by 50% or more compared to the average of the last 20 candles. Use Additional Indicators for Early Trend Detection, Implement Stochastic RSI: Detect oversold conditions early and alert when the indicator crosses above 20 (bullish signal). Use ADX (Average Directional Index): Monitor the strength of a trend. Notify if ADX crosses above 20 alongside other bullish signals. Add Parabolic SAR: Highlight potential entry points when the SAR indicator flips below the price. Combine Shorter and Longer MA Crossovers, Use a faster-moving average pair (e.g., MA3 vs. MA7) to detect very early crossovers, combined with existing MA7 vs. MA25 for confirmation. Example: Notify if MA3 crosses above MA7 (bullish), even before the larger MAs align.

1st line: HPP (which means high potential profit) if it meets requirements

2nd line: B letter in green (if u suggest to buy) or S letter in red (if u suggest to sell) - also in this line add: sudden change alert if it meet the criteria along B or S symbol.

3rd line: Symbol, for ex BTC/USDT

4th line: confidence level in %: this % shows how confident and sure you are of the buying or selling. For example, if most indicators align, then u put for ex 70-90%, if the indicators contradict each other even with price increases then u put for ex 30-40%, if more or less sure, put 50-60%

5th line: time frame (1mn, 2 or 3)

6th line price range: %

7th line: price now

**1. Hybrid Approach: Combining Fixed Monitoring with Dynamic Criteria**

* **Monitor Top N Gainers and Losers:** Continue tracking a fixed number (e.g., 30 gainers and 30 losers) to focus on the most impactful market movements.
* **Implement Additional Dynamic Monitoring:**
  + **Threshold-Based Alerts:** In addition to the top gainers and losers, set up criteria to monitor any token that experiences a sudden price change (e.g., ≥0.5%) within short timeframes (e.g., 1 minute).
  + **Limit Scope:** Apply this dynamic monitoring to a subset of tokens beyond the top lists to manage computational load.

**2. Optimize API Calls and Data Processing**

* **Batch Requests:** Where possible, fetch data for multiple symbols in a single API call to reduce the number of requests.
* **Asynchronous Programming:**
  + **Implement asyncio:** Utilize asynchronous programming to handle multiple API calls concurrently without blocking the script.
* **Rate Limiting Handling:**
  + **Monitor API Usage:** Keep track of your API call counts and implement backoff strategies if approaching rate limits.
  + **Caching Data:** Store recent data locally to minimize redundant API calls for tokens that haven't shown significant movements.

**3. Enhance State Management and Alert Filtering**

* **Efficient Data Structures:** Use optimized data structures (e.g., sets or dictionaries) for tracking alerts and cooldowns.
* **Alert Prioritization:**
  + **Severity Levels:** Assign priority levels to alerts based on the magnitude of price changes or token liquidity.
  + **Filter Noise:** Implement additional filters (e.g., minimum trading volume) to reduce false positives from low-liquidity tokens.

**4. Incorporate Advanced Technical Indicators Selectively**

* **Prioritize Indicators:**
  + **Essential Indicators:** Focus on indicators that provide the most value without adding significant computational overhead (e.g., RSI, MACD).
* **Modular Indicator Implementation:**
  + **On-Demand Calculation:** Calculate additional indicators only when specific conditions are met, reducing unnecessary computations.

**5. Consider Using Binance Websocket Streams**

* **Real-Time Data:** Websocket streams provide real-time data, eliminating the need for constant polling and reducing API call counts.
* **Efficient Data Handling:** Receive updates only when there are changes, enhancing efficiency and responsiveness.

dding New Technical Indicators:

Bollinger Bands

Average True Range (ATR)

Stochastic Oscillator

Optimizing Performance:

Implement asynchronous programming for efficient API calls.

Introduce caching mechanisms to minimize redundant data fetching.

Enhancing Notification Details:

Include additional data such as RSI values, ATR, or Bollinger Bands in Telegram alerts.

Customize alert messages based on the severity of price changes.

Automating Configuration:

Read monitoring parameters from a configuration file or environment variables for greater flexibility.

Implementing Advanced State Management:

Use more efficient data structures for tracking alerts.

Introduce persistence (e.g., saving alert states to a file) to maintain state across script restarts.

Integrating Websocket Streams (Advanced):

Utilize Binance's Websocket API for real-time data streaming, reducing the need for constant polling.