Input Parameters:

number\_of\_strikes\_OTM 10

instrument NIFTY BANK

instrument\_ltp 48000

CE\_price 10

CE\_limit\_price 5

start\_time 9:30

end\_time 15:15

expiry\_date 20240430

quantity 15

Exchange N

ExchangeType D

IsIntraday TRUE

Fromdate 2024-04-26 20:59:06

Todate 2024-04-26 21:55:06

Code steps

// 1. Place order

//API call or through websocket

Get the latest price for the instrument NIFTY BANK as instrument\_ltp

// till the time we figure out how to read the price from web socket use the instrument\_ltp from the input text file.

ATM\_strike = round(instrument\_ltp/100,0)\*100

strike\_CE = ATM\_strike + number\_of\_strikes\_OTM \* 100

strike\_PE = ATM\_strike – number\_of\_strikes\_OTM \* 100

//API call for order request

CE\_instrument = for <segment> + “NIFTYBANK” + <strike\_CE> +“CE”

place an entry order for CE\_instrument

with

quantity=15

price = 0 //it is a market order

action is BUY

type is intraday

extract order\_id from the API response and save it as order\_id

add an entry into the logs for order placement along with the parameters used for order placement

add an entry into the logs showing response for the order\_placement API call

// 2. Enquire order\_status

Get the order\_status using the value stored in order\_id obtained during order placement

Add an entry into the logs for order\_id with its status information obtained from the response

Example - BANKNIFTY 16 Apr 2024 CE 48700.00\_20240416\_CE\_48700

BANKNIFTY 30 Apr 2024 CE 49000.00\_20240430\_CE\_49000

// 3. Order\_exit

If the order\_status is COMPLETE then place an order with same set of parameters as in point 1 except the action will be SELL.

Add entries into the log for order placement parameters and the response for the API

// 4. Limit Order entry

For the same CE instrument in item 1 get the price of the CE\_instrument as CE\_price

// till the time we figure out how to read price from web socket use the CE\_price from the input text file.

Place an entry BUY order as in item 1 for the same CE\_instrument but price being CE\_price instead of 0.

// Lower price will ensure the order does not executed

Confirm that the order is place and its status is open

Add an entry into the logs about Limit Order placement with order id

// 5. Order Cancellation

Confirm that the Limit order placed in item 4 is in OPEN status

Add entry into the logs with the order\_id and its status

Call cancel\_order API for the order\_id of the Limit Order placed in item 4 which should be open.

Add entry into the logs with the response for the cancel order API

// 6. Order Rejection

Place an order for CE\_instrument as in point 1 but Action = SELL.

// it will need margin money in the account and hence the order should get rejected.

Print the response for this order with order information.

// 7. Order History

Call the order history API and print its output in the logs.

// 7. Price movement

Get the instrument\_ltp

Calculate ATM\_strike

For every 1 minute

Get CE\_price and PE\_price at the ATM strike.

Print ATM strike, CE\_price, PE\_price in the logs

// 8. Option Chain

Get the CE\_price and PE\_price at ATM strike as in item 7.

Increment strike from ATM\_strike by 100 for next 20 strikes

At every strike get CE and PE prices for that strike

Add CE\_price, PE\_price at that strike and write those prices and the strike price in the logs

decrement strike from ATM\_strike by 100 for next 20 strikes

At every strike get CE and PE prices for that strike

Add CE\_price, PE\_price at that strike and write those prices and the strike price in the logs