**Program specifications**

Inputs to program: Validate input and display appropriate error message for user. Stop the program

* Entry time and Exit time
* Index (NIFTY 50, NIFTY BANK, NIFTY FIN SERVICE, SENSEX, NIFTY MID SELECT, etc)
* Broker (Zerodha, Fyers, Finvisia, Angel, ICICI Direct, etc)
* Lot size
* Number of lots
* Premium 1
* Premium 2
* Premium 3
* Stop loss 1 (SL1)
* Stop loss 2 (SL2)
* Stop loss 2 (SL3)
* OTM 1
* OTM 2
* Buy hedges = Y/N
* Buy hedges distance
* Live trading indicator = Y/N

Initial section

* Program should select current expiry of the index
* Calculate quantity to sell = lot size of index \* number of lots
* Keep track of P/L to display at the end of program
* Place real trades if Live trading indicator = Y
* Program should display log with entry and exit value of each leg with profit and loss
* Make sure all buy and sell orders are placed in the system
* Calculate stop loss as follows
  + If Premium > 12 then SL 33%
  + If Premium >3 and <=10 SL 50%
  + If Premium <=3 then SL 100%
* Maintain OTM distance as follows
  + Till 2:15pm: OTM1
  + After 2:15pm OTM2

Main section

* Start the program as per entry time given
* Entry details:
  + Place sell order as: Sell ATM-OTM PE and sell CE approx. matching with PE
  + Place stop loss orders for legs as mentioned in initial section
  + If Buy hedges = Y then buy hedges on both side. Distance is ATM +/- buy hedges distance
* Adjustments:
  + If any side stop loss hits, then close that side and sell same side with approx. matching premium with other side and set stop loss.
  + If one side is approx. half of other side, then then close that leg which half and sell same side leg with approx. matching premium and set stop loss.
  + If both premiums are approx. same then recalculate stop loss
  + If both premiums are reduced approx. by 50% then recalculate stop loss

Last section

* Stop the program as per entry time given
* Close all open positions
* Display all required statistics
  + Total entries taken : ?
  + Number of time SL hit : ?
  + Total profit : ?

Other points:

* what if live data is not coming due net connection not working or broker server / exchange issue
* Hosting on desktop or cloud
* Cloud hosting - charges per month. Is it possible to use Lambda function to avoid charges?
* Developer should have trading account to do unit testing
* Developer should support traders for 1 month to do testing and at least 2 week of live trading.
* Cloud hosting - If we decide to host on cloud then developer should help 1-2 developers to do cloud implementation of python and develop short guide to do cloud implementation.
* Developer to provide traders python code and associated files and provide guide about how to do implementation