When program is started, check for time, if time before 9:15 am or after 3.35: pm, do not start, Read from table 1 in “ Live” sheet at pre set time interval – data will be updated every 1 minute takes approx. 2-5 seconds to be updated every minute

List of variables

1. Open level
2. Date
3. Time frame
4. Expiry 1
5. Expiry 2 ( this is optional)
6. Expiry 3 ( this is optional)
7. Weightage
   1. Cash
   2. Future
   3. Option
8. Stock Weightage list for Nifty50
9. Stock Weightage list for BankNifty

General : - all values to be considered in multiples of“1,00,00,000” - Cr

Analysis 1 – this needs to be done in 1 minute time frame

Cash flow for all items listed as “cash” are stock and as per below rules for time frame and highlights the most active ones negative and positive and summarize them as per their weightage in Nifty50 and BankNifty

Cash Exchange (CE) would be (current avg price X Volume), this needs to be calculated as running total individually and then together as per 2 lists multiplying with their respective weightage.

A for 1st iteration of the day , if closing price is higher then open price then consider (CE) as positive else (CE) negative

B for rest, if current avg price is higher than the previous avg price then consider (CE) as positive if current avg price is less then previous avg price consider (CE) as negative.

C if current avg price is same as previous avg price then consider value as previous cumulative value – if total (CE) is positive then (CE) positive else (CE) negative.

Result needed in form of line chart with respect to time interval, largest 10 active items ( negative or positive) need separate chart ( interactive or fixed).

Working provided in “ cash data” tables and summarized in “ cash summary(2)” sheets

End

Analysis 2

COI = change in Open Intrest

Here data of Open Intrest is updated only 3 minutes ( so when updated 1 minute 3rd update will have change in OI, when run in 2 minutes every 2nd update will have updated OI when run in 5 minutes every update will have updated OI – 99% I would run this on 1 minute only

So we would need to adjust the other data accordingly

Open = open 1st

Close = Close of last

Low = lowest of 3

High = max of 3

Traded qnty = sum of all 3 trades

Premium =last

Avg price = (High + Low )/2

NT = ( change in OI)COI / Traded Qnty

COI/NT = Change in OI / NT Need this as line / graph

Money flow for each Index as per below rule as against previous time interval

Sr no 1, 2 and 3 below rule

Version 1

Cash Exchange (CE) would be (current avg price X COI), this needs to be calculated as running total

A for 1st iteration of the day , if closing price is higher then open price then consider (CE) as positive else (CE) negative

B for rest, if current avg price is higher than the previous avg price then consider (CE) as positive if current avg price is less then previous avg price consider (CE) as negative.

C if current avg price is same as previous avg price then consider value as previous cumulative value – if total (CE) is positive then (CE) positive else (CE) negative.

Version 2

Start CE for each item as 0,

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Traded qnty ( delta) | Open Intrest ( Delta) | Premium ( delta) | Result CE ( COI x avg price) |  |
| + | + | + | +ve |  |
| + | - | - | -ve |  |
| + | + | - | -ve |  |
| + | - | + | +ve |  |

Version 3

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Traded qnty Delta) | Open intrest ( delta) | Premium ( delta) | Avg price ( delta) | CE ( COI x avg Pice) | Result |
| +ve | +ve | +ve | +ve | +ve | +ve (Normal Long) |
| +ve | -ve | +ve | -ve | -ve | -ve ( long profit booking) |
| +ve | +ve | +ve | -ve | -ve | -ve ( short position) |
| +ve | +ve | -ve | +ve | +ve | +ve ( long position) |
| +ve | -ve | -ve | -ve | -ve | -ve ( long cover) |
| +ve | -ve | +ve | +ve | +ve | +ve ( short cover) |
| +ve | +ve | -ve | -ve | -ve | -ve ( normal short) |
| +ve | -ve | -ve | +ve | +ve | +ve ( short profit booking |

Iteration value and running total of all 3 version needs to be displayed historically

Options

NT = ( change in OI)COI / Traded Qnty

ROC =rate of change

COI/NT = Change in OI / NT Need this as line / graph

Grouping by expiry date

Hera also OI is updated every 3 minutes so accordingly adjusted as before.

1 Related premium decay

Plot the premium change in all items and highlight the rate of change of the premium

2 IV

Plot the IV of the items and highlight the rate of change of the IV

3 combined graph

Plot 1 graph with 1st data of the day as base and running total as current and variation from previous data for the below listed items

1. OI
2. Traded qnty
3. Premium
4. CE = ( COI X avg price)
5. Premium flow ( COI x Premium)

4 Calculate for each item in running format

* I am not sure of the results at this time so we will just create table and live chart showing the case number -once I complete the analysis, will change the same later.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| COI /NT ( ROC) | IV ( ROC) | Premium ( ROC) | Volume ( ROC) |  |  |
| +ve | +ve | +ve | +ve | Case 1 |  |
| +ve | +ve | -ve | +ve | Case 2 |  |
| +ve | -ve | +ve | +ve | Case 3 |  |
| -ve | +ve | +ve | +ve | Case 4 |  |
| -ve | -ve | +ve | +ve | Case 5 |  |
| +ve | -ve | -ve | +ve | Case 6 |  |
| -ve | +ve | -ve | +ve | Case 7 |  |
| -ve | -ve | -ve | +ve | Case 8 |  |

5 for items with CE

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Close > open | Volume -variation | Result | Distance <50 | Distance 50 to 150 | Distance 150 to 250 | Distance 250 to 350 |
| No | +ve | Writing -RED | -1 | -.75 | -.5 | -.25 |
| Yes | +ve | Buying -Green | +2 | +1.5 | +1 | +.5 |
| No | -ve | Buyer close - RED | -1.5 | -1 | -.5 | -.25 |
| Yes | -ve | Writer close – Green | 1 | 1 | 1 | .5 |

for items with PE

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Close > open | Volume -variation | Result | Distance <50 | Distance 50 to 150 | Distance 150 to 250 | Distance 250 to 350 |
| No | +ve | Writing – Green | 1 | .75 | .5 | .25 |
| Yes | +ve | Buying - Red | -2 | -1.5 | -1 | -.5 |
| No | -ve | Buyer close – Green | +1.5 | +1 | +.5 | +.25 |
| Yes | -ve | Writer close – Red | -1 | -1 | -1 | -.5 |

We need a running score and total score based on these. This table should be editable at a later stage.

And the color tabs could keep updating live in a table