

- 1) Get All BANKNIFTY--> Like (BANKNIFTY03AUG1723000PE)--single record for day one
- 2) Based on day one date we need to get search in ALGO-1-->Result_Data
- 3) In Result_Data we need to round nearest 100 of closing price. --->9:22:59(only)

we got rounded_value --> rounded_value we need to search inside All BANKNIFTY(same date)

we got the BANKNIFTY_RESULT based on rounded value -> BANKNIFTY03AUG1723000PE

we need to find out PE and CE for 9:22 and 3:10---> both closing we need to add X_9 and Y_3---> (X_9-Y_3)

1)SELECT * FROM MERN_PLUS.BACKTEST_2016 where ticker LIKE 'BANKNIFTY%' AND ticker NOT LIKE 'BANKNIFTY-%' LIMIT 10;

```
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
| Id | ticker                | date       | time       | open | high | low | close |
volume | option_interest |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
| 0 | BANKNIFTY06OCT1617000PE.NFO | 05/10/2016 | 10:22:59 | 0.3 | 0.3 | 0.3 | 0.3 |
1040 | 2000 |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
```

2)SELECT * FROM MERN_PLUS.BACKTEST_2016 where (ticker LIKE '%BANKNIFTY-I' OR ticker LIKE '%BANKNIFTY-I.NFO') and date='05/10/2016' and time='09:22:59';

```
| Id | ticker                | date       | time       | open   | high   | low   | close |
volume | option_interest |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
| 0 | BANKNIFTY-I.NFO | 05/10/2016 | 09:22:59 | 19808.4 | 19808.4 | 19792 | 19805 |
18760 | 1988880 |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
```

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-----
-close_round= 19800-
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```

3)SELECT * FROM MERN_PLUS.BACKTEST_2016 where ticker LIKE 'BANKNIFTY%' AND ticker NOT LIKE 'BANKNIFTY-%' and date='05/10/2016' and ticker LIKE '%19800%' and time='09:22:59';

```
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
| Id | ticker                | date       | time       | open   | high   | low   |
close | volume | option_interest |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
| 0 | BANKNIFTY06OCT1619800CE.NFO | 05/10/2016 | 09:22:59 | 62.8 | 63.3 | 57.35 |
62.35 | 47360 | 383720 |
| 0 | BANKNIFTY06OCT1619800PE.NFO | 05/10/2016 | 09:22:59 | 124.4 | 135.55 | 124 |
126.95 | 32520 | 87320 |
| 0 | BANKNIFTY27OCT1619800CE.NFO | 05/10/2016 | 09:22:59 | 333.45 | 337.6 | 329.5 |
330.35 | 480 | 39560 |
| 0 | BANKNIFTY27OCT1619800PE.NFO | 05/10/2016 | 09:22:59 | 327.5 | 332 | 327.5 |
332 | 40 | 15240 |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
```

4)SELECT * FROM MERN_PLUS.BACKTEST_2016 where ticker LIKE 'BANKNIFTY%' AND ticker NOT LIKE 'BANKNIFTY-%' and date='05/10/2016' and ticker LIKE '%19800%' and time='15:09:59';

```
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
| Id | ticker                | date       | time       | open   | high   | low   |
+-----+-----+-----+-----+-----+-----+-----+-----+
```

```

close | volume | option_interest |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 0 | BANKNIFTY060CT1619800CE.NFO | 05/10/2016 | 15:09:59 | 11.25 | 11.4 | 10.4 |
10.5 | 23200 | 662000 |
| 0 | BANKNIFTY060CT1619800PE.NFO | 05/10/2016 | 15:09:59 | 217.2 | 226 | 217.2 |
225.1 | 4960 | 39920 |
| 0 | BANKNIFTY130CT1619800CE.NFO | 05/10/2016 | 15:09:59 | 94.2 | 97.15 | 94.2 |
96.15 | 160 | 18600 |
| 0 | BANKNIFTY270CT1619800CE.NFO | 05/10/2016 | 15:09:59 | 259.8 | 259.8 | 257.25 |
257.25 | 160 | 54840 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+

```

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5) 09_22_59-->
09_22_59_close_ce = 62.35
09_22_59_close_pe = 126.95
09_22_59_close_ce = 330.35
09_22_59_close_pe = 332

```

```
sub_of_ce_and_pe_5th = 09_22_59_close_ce + 09_22_59_close_pe
```

```

6) 15_09_5-->
15_09_59_close_ce = 10.5
15_09_59_close_pe = 225.1
15_09_59_close_ce = 96.15
15_09_59_close_pe = 257.25

```

```
sub_of_ce_and_pe_6th = 15_09_59_close_ce + 15_09_59_close_pe
```

```

7)
minus_of_5th_and_6th = sub_of_ce_and_pe_5th + sub_of_ce_and_pe_6th

```

```
1)SELECT * FROM MERN_PLUS.BACKTEST_2016 where ticker LIKE 'BANKNIFTY%' AND ticker NOT
LIKE 'BANKNIFTY-%' and date='01/09/2016';
```

```

+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
| Id | ticker | date | time | open | high | low | close |
volume | option_interest |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
| 0 | BANKNIFTY01SEP1615800PE | 01/09/2016 | 09:35:59 | 0.1 | 0.1 | 0.1 | 0.1 |
1600 | 1960 |

```

```
2)SELECT * FROM MERN_PLUS.BACKTEST_2016 where (ticker LIKE '%BANKNIFTY-I' OR ticker LIKE
'%BANKNIFTY-I.NFO') and date='01/09/2016' and time='09:22:59';
```

```

+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
| Id | ticker | date | time | open | high | low | close |
volume | option_interest |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+
| 0 | BANKNIFTY-I | 01/09/2016 | 09:22:59 | 19893.9 | 19893.9 | 19870 | 19879.85 |
17800 | 2907680 |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+

```

```
-close_round= 19900-
```

```
3)SELECT * FROM MERN_PLUS.BACKTEST_2016 where ticker LIKE 'BANKNIFTY%' AND ticker NOT
LIKE 'BANKNIFTY-%' and date='01/09/2016' and ticker LIKE '%19900%' and time='09:22:59';
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+
--+-+-----+-----+-----+-----+-----+-----+-----+
| Id | ticker | date | time | open | high | low | close |
| volume | option_interest |
+-----+-----+-----+-----+-----+-----+-----+
--+-+-----+-----+-----+-----+-----+-----+-----+
| 0 | BANKNIFTY01SEP1619900CE | 01/09/2016 | 09:22:59 | 23.2 | 23.55 | 18 |
20 | 97160 | 541640 |
| 0 | BANKNIFTY01SEP1619900PE | 01/09/2016 | 09:22:59 | 112.15 | 123.8 | 111.15 |
119.4 | 14120 | 72400 |
| 0 | BANKNIFTY08SEP1619900CE | 01/09/2016 | 09:22:59 | 100 | 100 | 95 |
95 | 200 | 11200 |
| 0 | BANKNIFTY08SEP1619900PE | 01/09/2016 | 09:22:59 | 189.55 | 190.05 | 189.55 |
190.05 | 40 | 2000 |
| 0 | BANKNIFTY29SEP1619900CE | 01/09/2016 | 09:22:59 | 308.4 | 308.4 | 297.7 |
297.7 | 960 | 22720 |
| 0 | BANKNIFTY29SEP1619900PE | 01/09/2016 | 09:22:59 | 316.95 | 329.6 | 316.95 |
329.6 | 200 | 9800 |
+-----+-----+-----+-----+-----+-----+-----+
--+-+-----+-----+-----+-----+-----+-----+-----+
```

```
4)SELECT * FROM MERN_PLUS.BACKTEST_2016 where ticker LIKE 'BANKNIFTY%' AND ticker NOT
LIKE 'BANKNIFTY-%' and date='14/07/2016' and ticker LIKE '%18700%' and time='15:09:59';
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+
--+-+-----+-----+-----+-----+-----+-----+-----+
| Id | ticker | date | time | open | high | low | close |
| volume | option_interest |
+-----+-----+-----+-----+-----+-----+-----+
--+-+-----+-----+-----+-----+-----+-----+-----+
| 0 | BANKNIFTY01SEP1619900CE | 01/09/2016 | 15:09:59 | 0.15 | 0.15 | 0.05 |
0.1 | 108520 | 1049800 |
| 0 | BANKNIFTY01SEP1619900PE | 01/09/2016 | 15:09:59 | 102 | 120.45 | 102 |
120.45 | 19720 | 112080 |
| 0 | BANKNIFTY08SEP1619900CE | 01/09/2016 | 15:09:59 | 84.3 | 84.5 | 80.25 |
81.65 | 3880 | 83080 |
| 0 | BANKNIFTY08SEP1619900PE | 01/09/2016 | 15:09:59 | 213.55 | 223.75 | 213.55 |
221.35 | 480 | 52440 |
| 0 | BANKNIFTY29SEP1619900CE | 01/09/2016 | 15:09:59 | 294.6 | 294.6 | 288.5 |
288.5 | 200 | 23800 |
| 0 | BANKNIFTY29SEP1619900PE | 01/09/2016 | 15:09:59 | 360 | 360 | 359.95 |
359.95 | 40 | 13280 |
+-----+-----+-----+-----+-----+-----+-----+
--+-+-----+-----+-----+-----+-----+-----+-----+
```

```
3)SELECT * FROM MERN_PLUS.BACKTEST_2016 where ticker LIKE 'BANKNIFTY%' AND ticker NOT
LIKE 'BANKNIFTY-%' and date='29/09/2016' and ticker LIKE '%19800%' and time='09:22:59';
```

1)We nee to get all BANKNIFTY data where date is thudays.

2)

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+-----+-----+-----+-----+-----+-----+-----+-----+
--+-+-----+-----+-----+-----+-----+-----+-----+
| Id | ticker | date | time | open | high | low | close |
| volume | option_interest |
+-----+-----+-----+-----+-----+-----+-----+
--+-+-----+-----+-----+-----+-----+-----+-----+
| 0 | BANKNIFTY14JUL1618700CE | 14/07/2016 | 15:09:59 | 143.4 | 144 | 142.55 | 144 |
5120 | 124560 |
| 0 | BANKNIFTY21JUL1618700CE | 14/07/2016 | 15:09:59 | 271.9 | 271.9 | 270 | 270 |
360 | 33600 |
| 0 | BANKNIFTY21JUL1618700PE | 14/07/2016 | 15:09:59 | 83.15 | 84 | 82.85 | 83 |
```

```

4320 |      84160 |
| 0 | BANKNIFTY28JUL1618700CE | 14/07/2016 | 15:09:59 | 363 | 366.5 | 362.45 | 366.5 |
680 |      59520 |
| 0 | BANKNIFTY28JUL1618700PE | 14/07/2016 | 15:09:59 | 156.4 | 156.4 | 155.05 | 156.1 |
1560 |      45880 |
+-----+-----+-----+-----+-----+-----+-----+-----+
+-----+-----+-----+-----+-----+-----+-----+-----+

```

```

BANKNIFTY      29/09/2016      19800  36.45  0.05      36.4      72800      19782.3 19150.45
631.85  3.3      9:22:59 BANKNIFTY29SEP1619800CE.NFO      29/09/2016      15:09:59
BANKNIFTY29SEP1619800CE.NFO      29/09/2016

```

```

{'INSTRUMENT_NAME': 'BANKNIFTY', 'EXPIRAY_DATE': '29/09/2016', 'STRIKE_PRICE': '',
'COMBINED_PREMIUM_AT_9_23AM': 36.45, 'COMBINED_PREMIUM_AT_3_10PM': '',
'DIFFERENCE_OF_COMBINED_PREMIUM': '', 'PERCENTAGE_OF_COMBINED_PREMIUM': '',
'FUTURE_AT_9_23AM': '19782.3', 'FUTURE_AT_3_10PM': '19150.45', 'DIFFERENCE': '631.85',
'PERCENTAGE': '3.3', 'time_is_1': '9:22:59', 'ticker_1': 'BANKNIFTY29SEP1619800CE.NFO',
'date_1': '29/09/2016'}

```

```

pe=53.65
ce=36.45

```

Some Query related to logic

```

SELECT * FROM MERN_PLUS.BACKTEST_2020 where (ticker LIKE '%BANKNIFTY-I' OR ticker LIKE
'%BANKNIFTY-I.NFO')

```

```

SELECT ticker, date, time, open, close FROM MERN_PLUS.BACKTEST_2020 where ticker LIKE
'BANKNIFTY%' AND date='02/01/2020' AND ticker NOT LIKE 'BANKNIFTY-%' and ticker LIKE
'%32600%' and time='15:14:59'

```

```

SELECT ticker, date, time, open, close FROM MERN_PLUS.BACKTEST_2020 where ticker LIKE
'BANKNIFTY%' AND date='01/01/2020' AND ticker NOT LIKE 'BANKNIFTY-%' and ticker LIKE
'%32300%';

```