VWAP Strategy

As discussed in the lecture the strategy is as follows:
There are players in the market that try to earn profits from the spread between the stock (cash segment) and its Future by buying the stock and shorting the future (hence making profits on cost of carry).

If in the early days of expiry, there is a rise in the OI of the futures and the spread between the cash and future hasn't decreased, then one can expect that traders are long in the cash market and short in the Futures segment. Traders usually unwind their positions during the month as the cost of carry decreases.

However, if during the month the cost of carry doesn't decrease and the OI remains high, then it is expected that the traders would either roll over their current month positions in futures to the next month or square off their cash positions. Failing to do this would cause the traders to be heavily long in the market as the future position would cease to exist at expiry.

Therefore, during the last day of expiry traders would want to unwind their cash positions as much as possible. This causes a dip in the cash market on the last day of expiry as market players are unwinding their cash positions. The strategy thus is, short the cash in the beginning of the last half an hour on the day of expiry (3:00pm), wait till the cash prices drop and then buy back the stock at around 3:20pm. In the last 5-10 minutes a lot of institutional investors start buying cash because of lower levels of cash price. Therefore, it is optimum to buy back cash at around 3:20pm. One could keep the cash positions till the next day because a bounce back is expected on the next day too.

This has been illustrated in the excel file which has one month's data for 2 stocks for OI and the cost of carry. It also has the last 30 minutes of movement in cash prices on the last day of expiry.