MMT-02 Summary Document

Market Structure Overview:

- Daily trading of stock on an exchange involves four price points viz O, H, L, C
- Between these points are a constant flow of bids and offers (Market participants willing to buy (bid) for shares and market participants willing to sell (offer))
- The buyer wants as low a price as possible.
- The seller wants as high a price as possible.
- For a trade to happen, the person willing to buy and the person willing to sell must agree on a price.
- Market participants place orders stating at what price and how much they are willing To Buy Or sell.

Special Order Type: It is an individual special order type that tends to be one or a combination of these three characteristics:

- Pegging: A pegged order is a limit order which pegs at the specified price level. If we want to buy at the best bid, then we place an order which keeps pegging at the best bid. Similarly, we can peg our order at any price level. Let's say, the current bid price is 100.00 and the tick price is 0.05. We want to peg at best bid + 1 tick, which becomes 100.05. So we place a limit order at 100.05 (which is the best bid plus one tick). Now, if the best bid increases to 100.10, our limit order will peg at 100.15. This way, we will keep pegging the order based on the pegging logic. We can have peg orders for the ask price as well.
- Hidden: Some or all of the volume in the order isn't shown on the order book.
- Discretion Order: They are just regular limit orders, except that they have a second limit price. This price is called as discretion price at which the trader is willing to trade using market orders.

Passive and Aggressive strategy: Any trading strategy can be passive or aggressive or as a combination of two:

- Passive Agent: It executes trades at an advantageous price by placing a limit order on bid/ask.
- Aggressive Agent: It opportunistically pays bid-ask to the market.

Key Strategy Ideas:

- Trend Following: It is also interchangeably referred to as momentum. This strategy goes with the trend, up/down.
- Market Neutral: Taking long and short positions in two or more different correlated/co-integrated instruments. It can be fundamental or statistical arbitrage. For example, Google and Microsoft are from the same sector and positively correlated. If the correlation between them goes down, then a long and short position can be taken. And once they get cointegrated, the position can be squared off.
- Delta Neutral: It is a portfolio strategy consisting of positions with positive and negative deltas such that the overall delta of all the assets is zero.
- Statistical Arbitrage: It is something similar to the Market Neutral strategy
- Market Making: This strategy takes a position on both sides of the market, Buy and Sell. It generates liquidity in the market. Also profitable to some extent.

VWAP

- Volume weighted average price(VWAP) is a trading benchmark that traders use.
- It is used as a benchmark to decide the price at which the security can be bought or sold.

Usage of VWAP:

- Volume weighted average price(VWAP) is a trading benchmark that traders use.

- It is also used for better order execution. It is used as a benchmark to decide the price at which the security can be bought or sold. The following method is used for getting the better price in order execution.
    - Buy if price < VWAP
    - Sell if price > VWAP

Blending Pegging and Discretion Strategy Example:

- Issue a buy order pegged to bid with 1 Tick Discretion Range
- This will automatically adjust the order price such that it is always equal to the current bid and maintains a discretion range of 1 tick above the current bid.
- Thus order receives the advantage of pegging (staying competitive) with the advantage of discretion (trade aggressively to increase probability Of execution)