<u>Matching Arbitrage / Derivatives transactions</u>

Steps:

- **Ticker Validation**
  - *Future Tickers*
    - Should contain "=" in the name,
    - "IS Equity"
    - Next 2 Characters after "=" will define the expiry month
      - ICICI=M5 IS Equity, here "M5" defines the expiry month
    - Transaction code allowed "C" or "H", were,
      - C = Buy
      - H = Sell
    - Adjusted Quantity = Quantity * Lot size of respective future ticker (may differ for different months)
  - *Cash Tickers,*
    - Will be in either of the three formats
      - IN Equity
      - IS Equity
      - IB Equity
    - Transaction code allowed "B" or "S", were,
      - B = Buy
      - S = Sell
    - Adjusted Quantity = Quantity * 1

- **Reading Long Note 1**
  - *Format*
    - " *** bps / *** dvd" (in case of Dividend)
      or,
    - " *** bps "
  - *Dividend*, if present should be added to the "Buy" side prices (New column with adjusted prices)
  - *Dividend Assumptions* to be provided by UTI team.

- **Transaction Type Identification (at transaction level)**
  - *Check if Cash ticker Present*,
    - If "*Yes*",
      - Transaction type = "Buy"
        Transaction type can be either "FA" or "Lot Change with Buy"
      - Transaction type = "Sell"
        Transaction type can be either "RA/Unwind" or "Lot Change with Sell"
    - If "*No*",
      - Check Current Month Transaction type
        - Transaction type = "Buy"
          Transaction type will be "Short Roll"

- Transaction type = "Sell"
  Transaction type will be "Long Roll"
- For "*Lot change*" transactions, split the transaction into two legs,
  - Leg 1 – Compare both the Future transactions, take the transaction with lower quantity to create the first leg,
  - Leg 2 – Residual from Leg 1 combined with Cash transaction to create Leg 2
  - Classify individual legs based on previous classification,
- All FA / RA transactions, we will need to Classify them based on Futures Ticker in CM, NM, FM, Spreads Calculation will be at this level
- **Net Quantity** for all pair transactions should be **equal to Zero**,
- For All **Cash "Sell"** transactions, **Salable quantity** as per system be **either more than or equal to transacted quantity**,
- For All **Futures "Sell"** transactions, either we **should have reciprocal "Buy" transaction** in **Cash (in case of FA)** or **Holdings in Cash (in case of Rolls)**

- **Aggregation of Transactions,**
  - Transactions would be aggregated in the following Order
    - Account code >> Broker >> Transaction Type >> Parent ticker
    - Quanty for Buy and Sell will nullify each other
  - Trade **Value = Quantity * Price**
  - **Spreads to be calculated at transaction level**, then aggregated at transaction type level for individual brokers & Account level using weighted average method (using trade value as weights)

- **For all transactions involving cash tickers, sell quantity should match with holdings.**

- **For Orders Sent to Brokers, the following should be validated with execution files,**
  - **Parent Ticker** should **match** at all the levels,
  - The **difference** between **quantity instructed and quantity executed** should be provided,
  - **Direction of trades** should be validated.

Trade Abbreviations and their respective directions

Transaction Type	Cash / Futures Direction
FA	Cash – **Buy** || Futures – **Sell**
RA / UW	Cash – **Sell** || Futures – **Buy**
SR	CM Futures – **Buy** || NM Futures – **Sell**
LR	CM Futures – **Sell**, NM Futures – **Buy**