

The Kite PnL Problem Statement

The client has given us "**orders**" file which is in CSV format. This file contains data on all trades made by an intraday trader in different stocks.

The column fields are:

1. **Time:** It is a timestamp (date with time)
2. **Type:** It explains the type of trade (Buy or Sell)
3. **Instrument:** This is the name of a stock
4. **Product:** "**MIS**" means it is an intraday *trade* meaning we have to buy and sell on the same day. "**CNC**" orders are held for longer than 1 day. *We are interested in MIS products.*
5. **Qty.:** This contains the number of shares bought or sold. The format is:
number_of_shares_executed/total_number_of_shares_placed_by_trader
6. **Avg. Price:** This is the price at which trade took place (can be either buy or sell).
7. **Status:** It contains three fields-
 - a. Cancelled: This means the order is cancelled by the trader.
 - It might be possible that a trader cancels an order before it is completely executed or partially executed.
 - A trader can't cancel an order if it is fully executed.
 - b. Rejected: It means the order is rejected by the stock exchange.
 - The reasons could be incorrect price, insufficient funds etc.
 - We can ignore this type of trade in calculations.
 - c. Completed: It means the order is completed.

Client Requirement:

Create a summary file in Excel that should contain three tables in different Excel sheets:

- 1) Different types of charges for Individual trade
- 2) Instrument and Type wise analysis with **weighted Avg. price & all calculated charges**
- 3) Overall Summary of Stocks with **Gross PnL, Net PnL, Total Charges and % Charges on Gross PnL.**

Your Task:

You have to write a Python program which will calculate the above-mentioned charges and write them into an Excel file.

To calculate transaction charges, refer to this: <https://zerodha.com/charges#tab-equities>
In above link check for **Equity Intraday** section. Use **NSE values** for calculations.

You are allowed to google.