The Kite PnL Problem Statement

Problem Description

The client has provided an "orders" file in CSV format. This file contains data on all trades made by an intraday trader in different stocks.

Column Fields:

- 1. Time: Timestamp (date with time)
- 2. Type: Type of trade (Buy or Sell)
- 3. Instrument: Name of the stock
- 4. Product:
 - "MIS": Intraday trade (buy and sell on the same day)
 - "CNC": Orders held for longer than 1 day (not required for this task)
- 5. Qty.: Number of shares bought or sold in format: executed/total placed
- 6. Avg. Price: Price at which the trade took place (buy or sell)
- 7. Status:
 - Cancelled: Order was canceled by the trader
 - Rejected: Order was rejected by the stock exchange (Ignore these trades)
 - Completed: Order was fully executed

Client Requirement

Create a summary file in Excel containing three tables in different sheets:

1) Individual Trade Charges Breakdown

| Type | Stock | Product | Qty. | Avg. Price | Status | Turnover | Brokerage | STT/CTT | ETC | SEBI |
GST | Stamp Charges | Total Charges |

2) Stock-wise and Type-wise Analysis (Weighted Avg. Price & Charges)

| Instrument | Type | Qty. | Avg. Price | Turnover | Brokerage | STT/CTT | ETC | SEBI | GST | Stamp | Charges | Total Charges |

3) Overall Stock Summary

| Instrument | Gross PnL | Total Charges | Net PnL | % Charges on Gross PnL |

Your Task

Write a Python program to calculate the charges and write the results into an Excel file.

Reference for Transaction Charges

For transaction charge calculations, refer to:

Zerodha Charges - Equity Intraday