

## Stock Order Execution System!

**Problem:** A stock order is an order to buy/sell a given quantity of stocks of specified company. Person willing to buy or sell a stock will submit an order to a stock exchange, where it is executed against the opposite side order of same company i.e, buy order is executed against an existing sell order and vice-versa. The criteria for stock orders execution is that, they should belong to same company, they are opposite sides ( Buy vs Sell), and order of arrival i.e, the order is executed against the first available order. The left over quantity after execution is called remaining quantity. For example, if a buy order of quantity 10 is executed against a sell order of quantity 5, the remaining quantity of buy and sell orders are 5 and 0 respectively. An order status is called OPEN if the remaining quantity is greater than zero( $>0$ ), otherwise it's called CLOSED(i.e., remaining quantity = 0). Your task is to implement stock order execution system which takes input orders from given CSV (SOES - Input.csv), processes them and prints the status, remaining quantity of all the orders as output. Sample output is attached.