This exercise is not meant to take more than a couple of hours; if it feels like a huge ask, please give us that feedback! If you would like to spend longer on it you can, but we would prefer to look at work in progress because we respect your time. While this particular problem may be simple enough for a small script, we ask that you use Java and don't do the whole thing in a single method. We are hoping to get a sense of how you layout clean, maintainable code and which unit tests you write, as well as looking for correct code.

The goal of this program will be to determine which orders are valid orders and which orders are invalid orders.

There are three files attached. One is the list of symbols trading on a fictional exchange, the second is a list of the brokers sending orders to a fictional exchange, and the third is a series of messages sent over the course of an hour in csv format. Please write a program that reads in this third file and filters the orders sent on the basis of a few rules:
1. Only orders that have values for the fields of 'broker', 'symbol', 'type', 'quantity', 'sequence id', 'side', and 'price' should be accepted.
2. Only orders for symbols actually traded on the exchange should be accepted
3. Each broker may only submit three orders per minute: any additional orders in should be rejected
4. Within a single broker's trades ids must be unique. If ids repeat for the same broker, only the first message with a given id should be accepted.

The output should be two files with lists of the broker and id of accepted and rejected orders, in the order in which the orders were sent.

If you complete that, there is also an extra credit:
Pick a message format you would use to pass information to another system you were writing, and in addition to the two files with lists of broker names and ids, print out two more files: one with all the accepted orders and one with all the rejected orders

Please provide a link to a GitHub project, instructions on how to run the program and whatever tests you have written.

You can feel free to reach out with any questions or clarifications, but particularly over the weekend or evening we may not be able to respond. If you don't hear from us, you can make any assumptions that seem reasonable and simply document them in the README.