



NEW YORK STOCK EXCHANGE

Code To Connect: Group 20

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Table of contents

01

Overview

02

Design and architecture

03

Consolidated
reports



Our Approach

Prioritising efficiency and readable code,
we wrote a program in Java to validate,
match, and collect information on
orders.

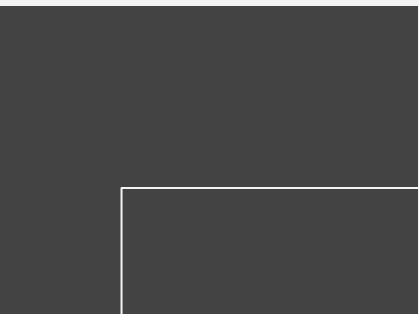


Matching Policy

Our program checks that the transaction is valid, then logs the invalid ones to help create a report at the end of the day.

Matching Algorithms

Our algorithm searches for matches, checks the top orders, and matches if their prices are compatible: in other words, the sell price is less than or equal to buy price.



In order, our program
prioritises price, rating, and
arrival time in determining
who gets matched first.



Matching Priority

Consolidated Reports

1	CLIENT_105	INST_000	98879
2	CLIENT_105	INST_002	123
3	CLIENT_105	INST_001	3601
4	CLIENT_105	INST_008	43093
5	CLIENT_105	INST_007	34
6	CLIENT_105	INST_009	712
7	CLIENT_105	INST_004	12793
8	CLIENT_105	INST_003	49
9	CLIENT_105	INST_006	148
10	CLIENT_105	INST_005	343405
11	CLIENT_104	INST_001	8705
12	CLIENT_104	INST_000	170542

1	ORDER_4226	POSITION_CHECK_FAILED
2	ORDER_9917	POSITION_CHECK_FAILED
3	ORDER_5559	POSITION_CHECK_FAILED
4	ORDER_4225	POSITION_CHECK_FAILED
5	ORDER_7736	POSITION_CHECK_FAILED
6	ORDER_9915	POSITION_CHECK_FAILED
7	ORDER_9913	POSITION_CHECK_FAILED
8	ORDER_9910	MISMATCHED_CURRENCY
9	ORDER_4228	POSITION_CHECK_FAILED
10	ORDER_7735	MISMATCHED_CURRENCY

1	INST_002	null	null	10229	100.79458402580897	101.0	0.0
2	INST_001	null	null	1043800	100.74974746119948	101.0	0.0
3	INST_004	null	null	937100	100.79089531533454	101.0	0.0
4	INST_003	null	null	10615	100.8185209609044	101.0	0.0
5	INST_006	null	null	12675	100.78190927021696	101.0	0.0
6	INST_005	null	null	12547000	100.71941654578785	101.0	0.0
7	INST_008	null	null	7806999	100.73172892682578	101.0	0.0



Thanks

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