# Move validation

In order to determine whether our rather large move-set was composed on moves that have no overlap in terms of their moved schedules, tests were performed where moved schedules were compared. Initially, it was discovered that there was some overlap between the swap-moves and the move-moves. First, a random schedule was constructed. Next, all moves were applied to this schedule to produce a list of moved schedules. A set of moved schedules was then created, showing that the list of 927 moved schedules contained only 900 unique ones. All moves were then grouped by their moved schedules resulting in the output shown in figure X.

The validation showed that swapping an order with the order that comes after it, results in the same moved schedule as moving the former behind the latter. In other words, swapping the order at queue-index with the order at index is effectively the same operation as inserting order at index (deleting the original). It was therefore decided that move-moves where an order was moved back one spot in the queue would be excluded from the list of moves.

A screenshot of a computer program

Description automatically generated

