

## Sequencium

Have you ever been playing sequencium and wondered “Is there an ideal compromise between aggressive and defensive play?”, this is what our player offers.

For this player we prioritize the highest value moves available. However, if there is a move available to the player that steals any of the opposing player's highest value moves then our player will take it, even if it means making a move that won't necessarily increase our player's maximum move. This stealing tactic only activates when the option to steal a square directly adjacent to one of our player's squares arises, otherwise the highest value move will be taken. Only stealing when directly adjacent as well as taking the steal with the highest value move available guarantees a healthy compromise between building the player's score and blocking the opponent. The result of our players tactic is shown below (Figure 1) where our player is pitched against a random player in head to head.

tempPlayer	14	anrz	7
tempPlayer	12	vlud	7
tempPlayer	16	brdk	6
tempPlayer	15	ctjr	7
tempPlayer	13	fagc	9
tempPlayer	12	azwm	7
tempPlayer	12	sajg	7
tempPlayer	10	utgv	7
tempPlayer	12	utit	6

As you can see our player wins by a significant margin. To achieve this we first loaded all possible moves for our player into an array and sorted them by highest value of move to lowest. We did the same for the opponent's moves also, making sure to take the absolute value of the 'values' for easy comparison to our players 'values'. We then compare all our moves from highest to lowest value against the opponent's highest value moves by comparing x and y coordinates, if there is a match we take it, if not, we take the highest value move available in our array of moves.