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# Softwarepraktikum SS 2021

## **Assignment 5 Report**

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### Group 3

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# Contents

<b>1</b>	<b>Task 1</b>	<b>3</b>
<b>2</b>	<b>Task 2</b>	<b>4</b>
<b>3</b>	<b>Task 3</b>	<b>5</b>

Jamie worked on Task 1 for the last assignment already. This week she implemented the Aspiration window algorithm.

Thomas worked on finding a good window size and benchmarking the Aspiration window algorithm.

# Task 1

Already implemented and discussed in the previous assignment.

## Task 2

The second task of the assignment dealt with implementing the aspiration window algorithm. We save the alpha and beta values from the last evaluations and use those as our guess for the next alpha/beta values. Then a window is added. We found a good having versions of our own Ai play with different winddowsizes against eachother.

## Task 3

We found an optimal window size by letting Versions of our AI with different window sizes play against each other. Minimizing the times the calculation needed to restart led to windows that were too big. We decided to settle for a window size of 5, this way about every Xth calculation is restarted. We noticed that the mapsize heavily influences the goodness of our window size. Therefore we plan to make a dynamic window size depending on the mapsize or the in relation to the last evaluation of the board. This would most definitely be an optimisation to our current solution, but it heavily depends on the heuristic we use. Next week our focus will be on reworking our heuristic because of the lack of performance from our AI, the window size will be optimised again fitting the new heuristic.