

## Project 2 FAQ

<p>Is there any specification on how should we value a state for the hill-climbing algo?</p> <p><b>Answer: As long as you implement a hill-climbing algorithm (any variant) and it returns a goal state where the number of pieces left is at least K, the solution is acceptable.</b></p>
<p>“Operation timeout error” on codepost meaning.</p> <p><b>Answer: Operation timeout happens as long as one of your testcase runs for &gt; 30s, causing codepost to terminate the program early. If you are facing this error, this means that your code may not be terminating and CodePost will terminate the execution after 30 seconds.</b></p>
<p>Is there any case where a position on the chess board is occupied by two pieces, one obstacle and one non-obstacle?</p> <p><b>Answer: No. One position can only be occupied by 1 object. (Piece/Obstacle)</b></p>
<p>2. Is there any case where no goal solution with no pair of pieces threatening each other is found? If that is the case, then what should be returned instead?</p> <p><b>Answer: No. There are no such cases for this project.</b></p>
<p>My local search algorithm uses a lot of stochastic elements and due to this, the time taken for each test case tend to vary a bit each time I submit. Hence, on some occasions I’m failing some testcases but on other occasions I pass all testcases. What should I do?</p> <p><b>Answer: You will be given full credit if your latest submission passes all testcases. There are limitations of the testcases given the stochastic nature of local search, but as long as you can guarantee that your implementation passes all testcases in a single submission at least once, you will be given the credit. The testcases are also made in the way that as long as your implementation is right and efficient enough, you will be able to pass it under the time limit.</b></p>
<p>What's the general limit on the number of pieces/board size?</p> <p><b>Answer: For the number of pieces, the general limit will be the size of the board (nxn)/2. (Imagine all Knights only). As for board size, the limit will be around 26x26.</b></p>
<p>How much time should local search cases 1 to 3 take?</p> <p><b>Answer: They should take &lt;1s for all 3 testcases</b></p>
<p>CSP Error “There exist another piece or obstacle on the same grid” meaning.</p> <p><b>Answer: This means that are trying to place pieces where the obstacles/pieces are at.</b></p>
<p>Are we expected to use AC-3 algorithm for CSP ?</p> <p><b>Answer: No, but you can implement it if you want to. For this project, forward checking is sufficient to solve all testcases.</b></p>