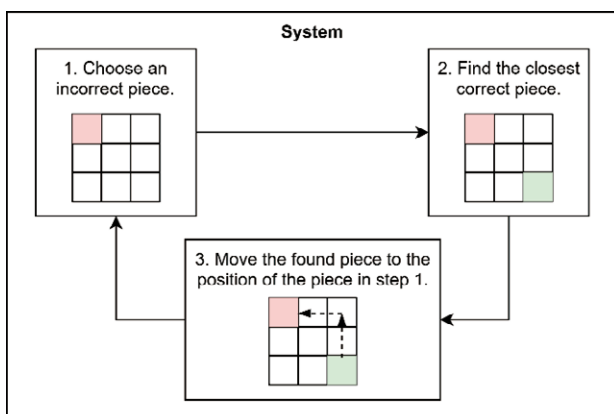


1. Overview

The following figure summarizes our approach to the competition problem, which consists of three main phases. Each phase corresponds to a module in our system. The key idea is iterating through incorrect pieces to restore each piece one by one while keeping the iterated region intact.



This approach focuses on ensuring that there are no pieces in disagreement with the goal board.

2. Details

2.1 Choose an incorrect piece

We traverse the start board row by row. For each row, we iterate through the pieces and if a piece is incorrect, we proceed with the next step.

2.2 Find the closest piece with the correct value

We use breath-first search (BFS) algorithm from the chosen location and stop right after finding a piece with the correct value.

2.3 Move a piece to the desired location

To move a piece to an arbitrary location, we move vertically and then horizontally. Moving one step can be done by placing 1x1 dies next to the piece in the desired direction. To move more than one step, we apply the 1-step move multiple times.