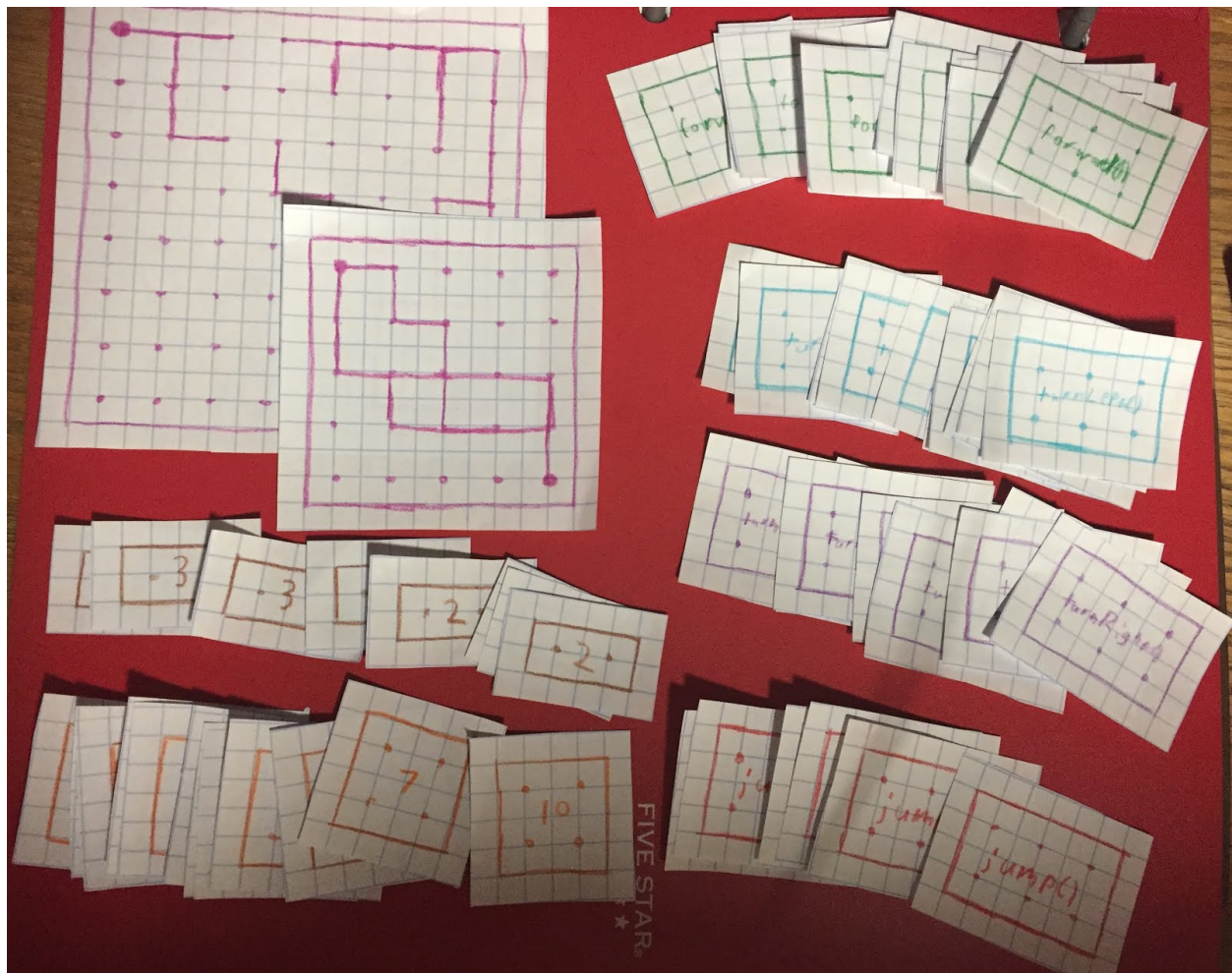


Board game name: `player.code()`

My board game, which I have named '`player.code()`', is intended to teach elementary school students basic programming principles. Additionally, the game conveys the negativity of wage discrimination that is prevalent in the tech industry and the rest of the economy. While this game is targeted towards elementary schoolers, the game could also be enjoyed by middle schoolers, but is likely too easy for high schoolers. The game is meant to be collaborative, played in groups of 2 to 4.

The objective of the game is for players to move from one large dot to another by moving along the paths indicated on the magenta puzzle cards shown below. Players begin by placing a single group object or token on one of the two large magenta dots on the puzzle card facing the token in any direction. Players must use action cards, such as 'forward', 'turn left', and 'jump' in order to accomplish the task of moving the token from one large magenta dot to the other. Players can also use loop cards to repeat a group of actions if necessary. After each puzzle card has been completed, players will draw a point card, which determines how many points each player will receive for this round. Most point cards award the player 10 points, but some point cards award less.



The large, magenta cards are puzzle cards. They represent the puzzle that players are meant to solve. Puzzle cards contain paths that start from one large dot and end at another. The goal is for players to move from one large dot to the other. Notice that puzzle cards can be of varying size and difficulty, so players of varying age and skill level should be able to play the game without too much trouble.

The green 'forward' cards move the player's token forward. Players use this card to advance straight ahead to another dot connected by a path.

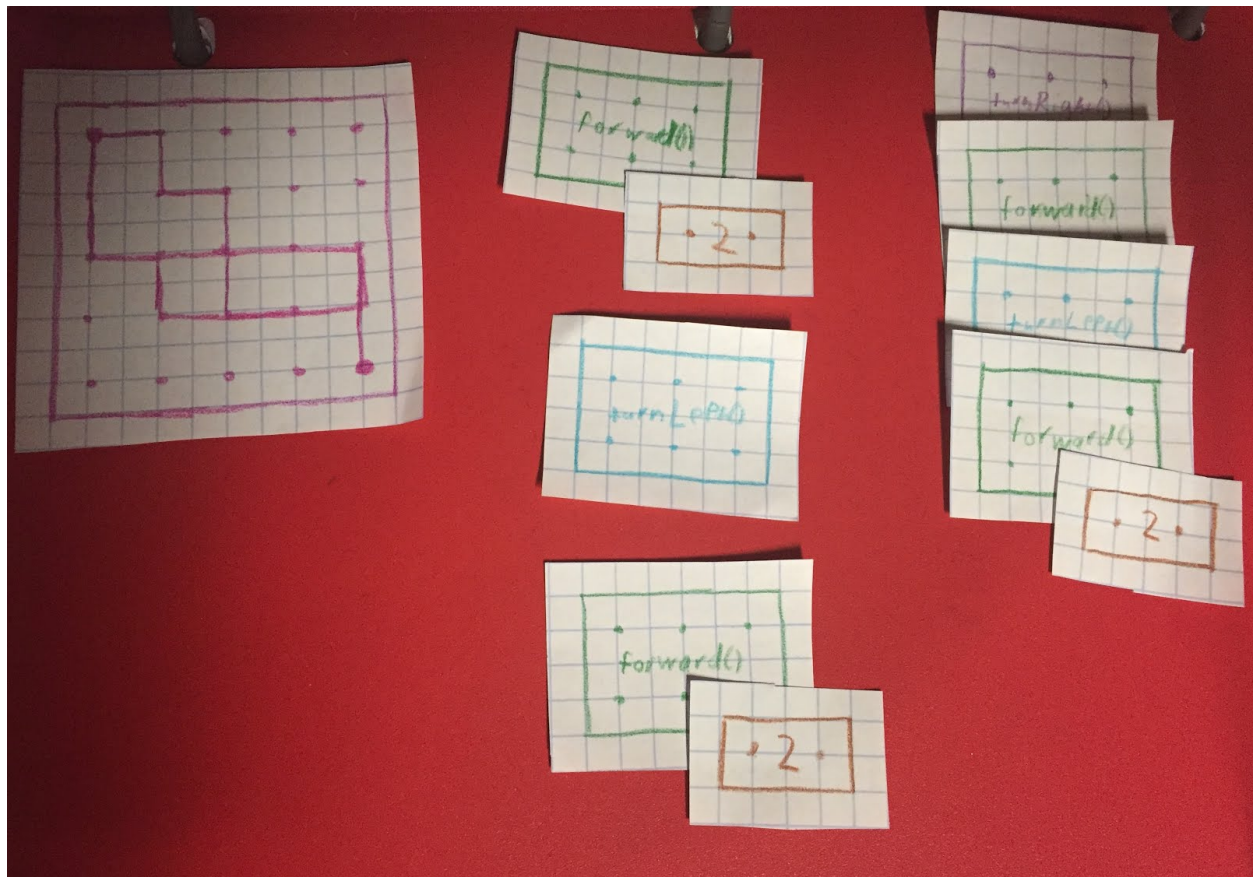
The blue 'turn left' cards turn the player's token left relative to the direction the token is currently facing.

The purple, 'turn right' cards turn the player's token right relative to the direction the token is currently facing.

The red 'jump' cards allow the player's token to jump to a dot straight ahead, provided that dot is connected to a path.

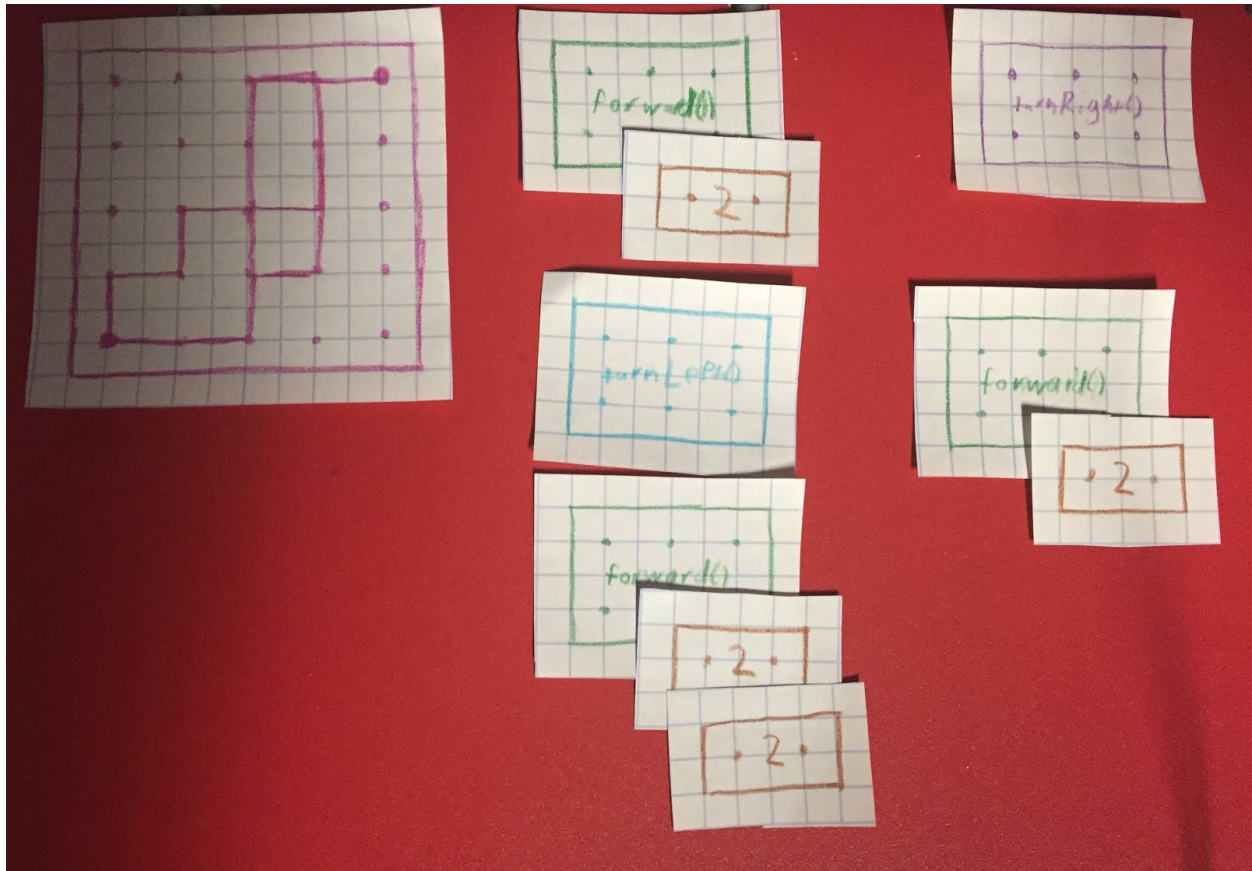
The brown cards are 'loop' cards. They allow certain actions to be grouped together and repeated.

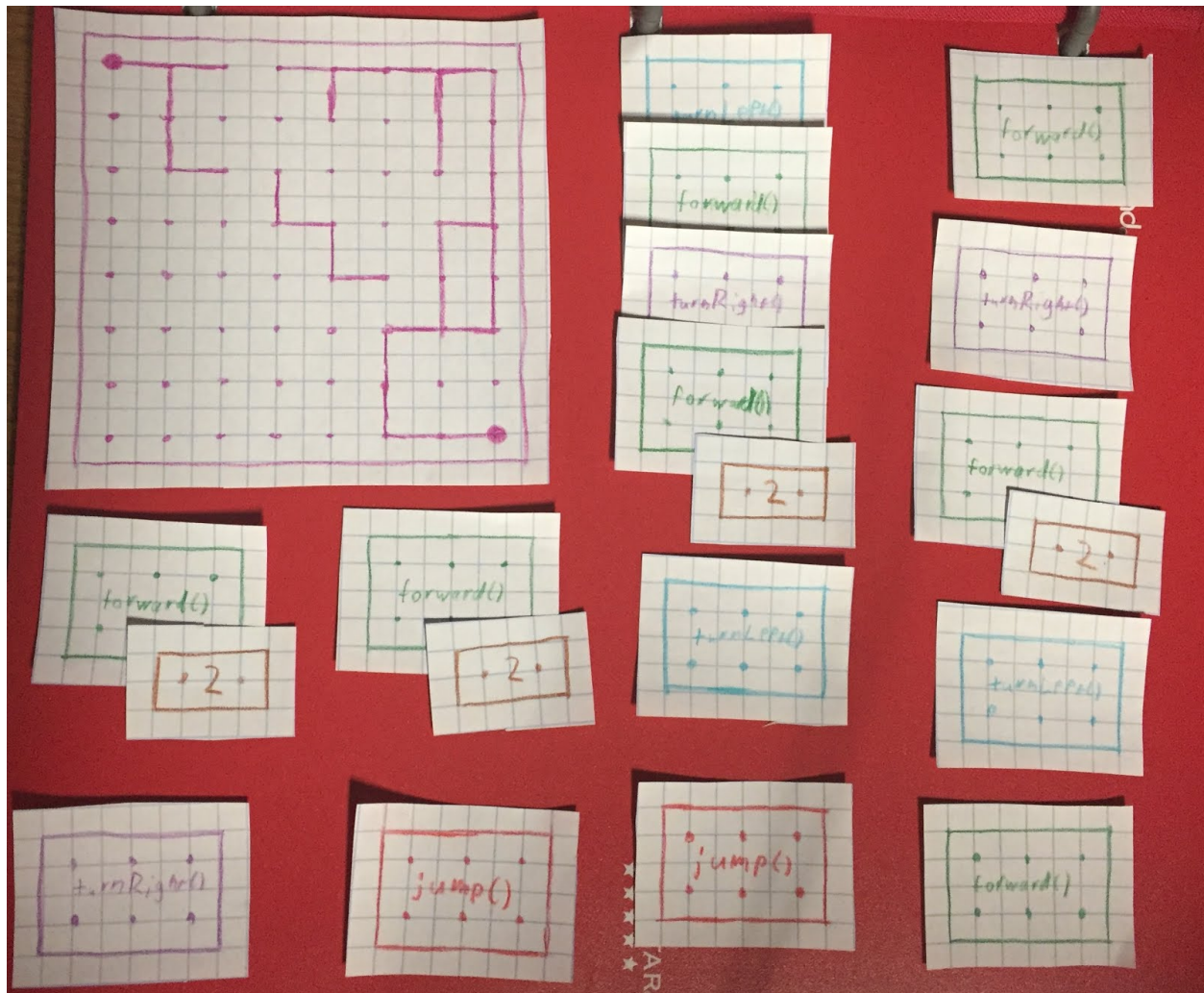
The orange cards are 'point' cards. They determine the score that will be awarded to players at the end of the round.





The photo above portrays a puzzle card along with a correct solution. Players of the game would work together in order to develop a solution, which may or may not be similar to the one shown. In this sample solution, the player's token would start in the bottom right of the puzzle and end in the top left. The solution is as follows: forward twice, turn left, forward twice. Then, turn left, forward, turn right, forward - all repeated twice. The puzzle card could be rotated 90 degrees to produce a different puzzle. Players could also start from the top and end at the bottom of the puzzle, if so desired. The picture below shows the same puzzle card, but rotated 90 degrees and starting from the bottom left. This configuration produces a different solution.



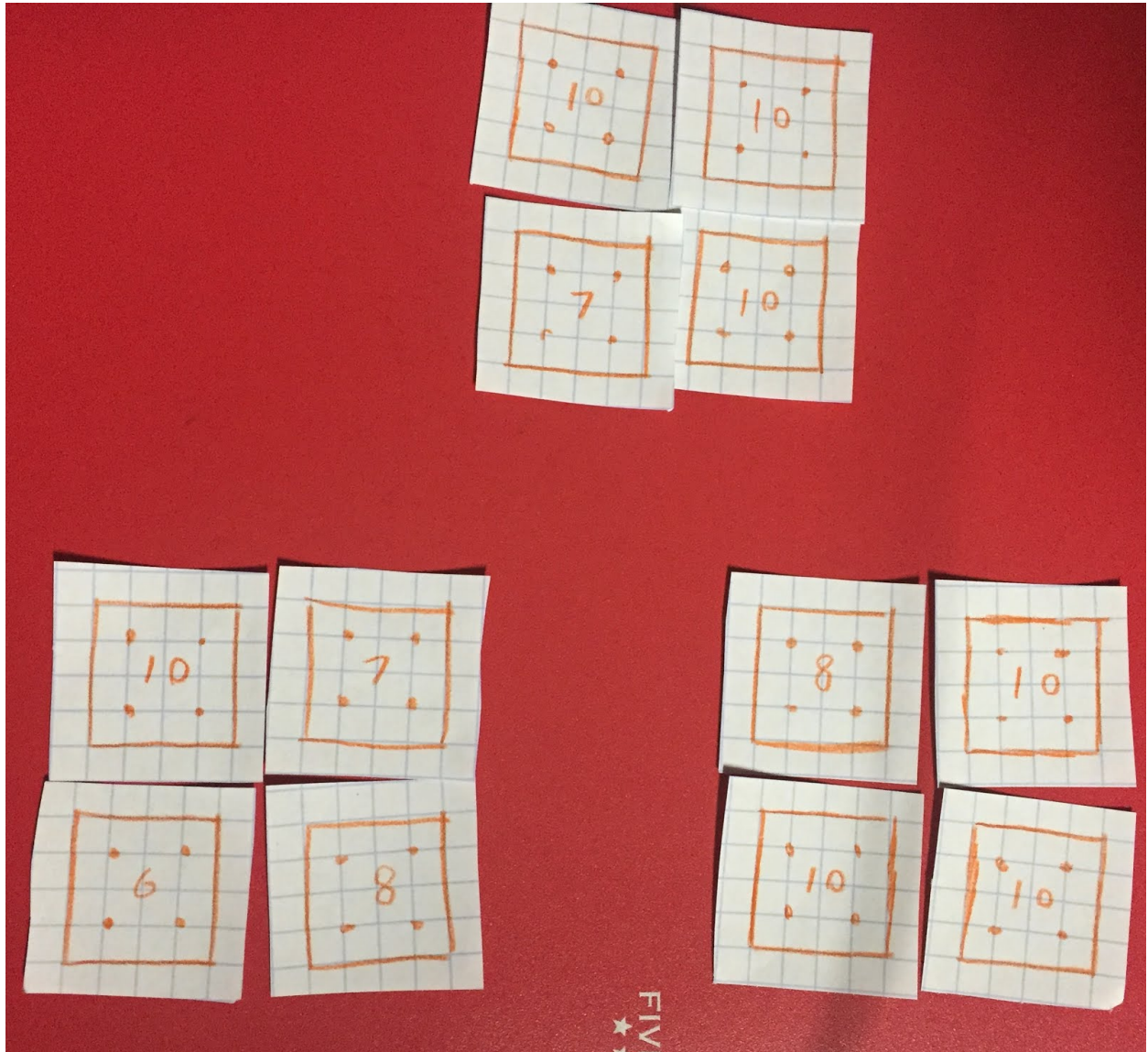


A picture of another more complicated puzzle and an accompanying solution. Solution starts at the top of the leftmost column and descends vertically, then to the right.

This game is played with the playing cards provided. Ideally, the game should be played on a flat surface, such as a table or floor. In addition, more experienced players could opt out of using action cards and instead use pencil and paper to write down pseudocode to move the player token.

Through this game, I hope that younger students are able to learn basic programming skills, attention to detail, and teamwork. Through the unfair distribution of points via point cards, I hope that players are able to see the negative ramifications of wage discrimination. Although all players worked together to solve the puzzle cards, some players were rewarded less for their work. This will make players who receive fewer points feel cheated or discourage them from playing, something that wage discrimination does indeed do to real people. Hopefully, players will come to the realization that wage discrimination is harmful in the game, and change the rules of the game to eliminate point cards entirely, or ensure that each player is given the same number of points after each round.





A sample distribution of point cards between three players. The player in the bottom right is awarded the most amount of points, even though all three players worked together in the game and contributed equally.