

Snakes and Ladders

Snakes and Ladders is a game played on a 10X10 board. The goal is to get from square 1 to square 100. On each turn players roll a six-sided dice and move forward a number of squares equal to the result. If they land on a square that represents a snake's head, they will be transported to the tail; if they land on the foot of a ladder, they will be transported to the head of the ladder.

This program should be based on the breadth-first search described on pages 757-8 in chapter 15. Reading all of chapter 15 would also be helpful!

Additional information is in the slides in Canvas. I used an array to tell me the next space on the board from each given space. I used a C++ `set` to keep a list of spaces visited, so I would not loop through the graph by mistake. I used a C++ `deque` to create the "Work Queue" needed for this algorithm.

For the following board, find the smallest number of turns it takes to win.

