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CS 146-Section 2

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Project 2 Report

Doing this project, I have learned about the printf function that is required for printing when there is a certain print format required. I have also learned how to implement DFS and BFS onto any graph data structure to find the shortest path between one point and the end. One struggle that I had when doing the BFS solution, was how to keep track of the original cell block after adding it to the queue because we lost track to the currentCell after we take it off the queue. I solved this problem by having a private variable in the vertex class I used which kept track of the “parent” or which vertex led to the discovery of the that Vertex and was able to backtrack by going to the parent of the vertex and going all the way back to the start. I used this logic to print out the BFS solution at the end of the program. Another issue I had was printing of the hashes to indicate the path, the solution I came up to this problem was to print the hash in the current cell, and check the neighbors to

see which one of the neighbors had a hash, and the neighbor that had a hash indicated the shortest path, so I put a hash in-between the two cells. I would just like to add that this should have been a single person project because it is not meant for two people, this is a very complicated project and sending my code to another person is not very ideal because they may not understand it, or they may misunderstand it and do something that it totally wrong in their program, and then I have to go back and fix their mistakes. It's very redundant, it would have been easier if this was a single person project, and we could communicate with others when we become stuck.