

Eric Hall – CS469 – HOS06 – Challenge Answers

Challenge #1:

You would choose Breadth-First Search (BFS) when you need to find the shortest path in an unweighted graph. BFS explores each layer of nodes before moving to the next, ensuring it finds the shortest path first in terms of the number of edges.

Challenge #2:

If you add more edges to a graph while running BFS, you could potentially find a new, shorter path between two nodes which would create a new shortest path possibility. However, BFS will also have more edges to explore which might increase the script's runtime.