

CPSC319 Assignment 4

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1) The best algorithm for finding a loop would be depth first traversal. You just continue around the loop and when the element hits the source you know you have a loop.

The worst case is when every node and vertex is part of the loop and visited, the complexity of this is $O(V+E)$.

2) Looking at my output files that the shorter routes seem to be found with depth first but breadth first, even though it took longer paths sometimes, it found paths that depth first could not. Efficiency I would say depth first is better, but for accuracy breadth first is better.