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Report

StreetMap

load():

O(N)

This is the time complexity when N is the number of lines in the text file because my code loops through every line in the text file.

getSegmentsThatStartWith():

O(1)

This function uses the ExpandableHashMap find function and in the average case, this function’s big O is O(1) since it is a hash table.

PointToPointRouter

generatePointToPointRouter():

O(N)

This is the time complexity when N is the number of segments in the map since the function loops through each segment until it finds the end coordinate.

DeliveryOptimizer

optimizeDeliveryOrder():

O(N)

This is the time complexity when N is the number of deliveries that the function has to make since my function loops once for every delivery.