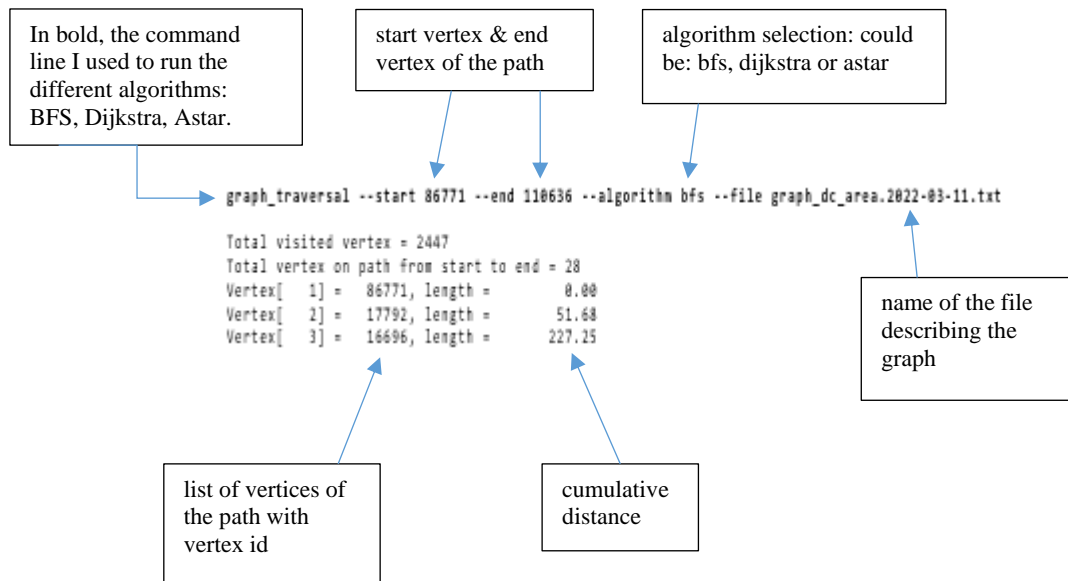


Project: Map Path Finder [Some Help #1]

In this document, you will find traces which could help you debug your program.

1.1 How to Read my Traces



1.2 BFS Trace



Beware that for BFS, the total length could be different from mine, but the number of vertices on the path must be the same.

```
graph_traversal --start 86771 --end 110636 --algorithm bfs --file graph_dc_area.2022-03-11.txt
```

Total visited vertex = 2447

Total vertex on path from start to end = 28

Vertex[1]	=	86771,	length =	0.00
Vertex[2]	=	17792,	length =	51.68
Vertex[3]	=	16696,	length =	227.25
Vertex[4]	=	16703,	length =	279.42
Vertex[5]	=	24989,	length =	333.06
Vertex[6]	=	11028,	length =	383.75
Vertex[7]	=	83930,	length =	480.53
Vertex[8]	=	35373,	length =	577.26
Vertex[9]	=	33436,	length =	687.96
Vertex[10]	=	33432,	length =	766.93
Vertex[11]	=	34708,	length =	825.36
Vertex[12]	=	190155,	length =	911.36
Vertex[13]	=	4786,	length =	992.97
Vertex[14]	=	54568,	length =	1100.51
Vertex[15]	=	33587,	length =	1235.65
Vertex[16]	=	9034,	length =	1280.02
Vertex[17]	=	36665,	length =	1372.78
Vertex[18]	=	72825,	length =	1413.71
Vertex[19]	=	131943,	length =	1523.30
Vertex[20]	=	44262,	length =	1561.82
Vertex[21]	=	106721,	length =	1686.55
Vertex[22]	=	20735,	length =	1726.01
Vertex[23]	=	4063,	length =	1766.86
Vertex[24]	=	90787,	length =	1837.73
Vertex[25]	=	93541,	length =	1887.87
Vertex[26]	=	15849,	length =	1916.63
Vertex[27]	=	81615,	length =	1987.59
Vertex[28]	=	110636,	length =	2034.47

1.3 Dijkstra' Trace

```
graph_traversal --start 86771 --end 110636 --algorithm dijkstra --file graph_dc_area.2022-03-11.txt
```

Total visited vertex = 1910

Total vertex on path from start to end = 40

Vertex[1] =	86771,	length =	0.00
Vertex[2] =	17792,	length =	51.68
Vertex[3] =	16696,	length =	227.25
Vertex[4] =	16703,	length =	279.42
Vertex[5] =	24989,	length =	333.06
Vertex[6] =	11028,	length =	383.75
Vertex[7] =	11026,	length =	448.25
Vertex[8] =	15310,	length =	480.77
Vertex[9] =	46381,	length =	515.21
Vertex[10] =	84402,	length =	563.19
Vertex[11] =	101294,	length =	611.60
Vertex[12] =	21358,	length =	707.90
Vertex[13] =	21361,	length =	749.51
Vertex[14] =	36149,	length =	773.83
Vertex[15] =	34708,	length =	819.48
Vertex[16] =	96195,	length =	863.77
Vertex[17] =	54412,	length =	895.26
Vertex[18] =	54410,	length =	926.76
Vertex[19] =	61363,	length =	967.79
Vertex[20] =	61366,	length =	1053.13
Vertex[21] =	110218,	length =	1093.06
Vertex[22] =	110217,	length =	1098.67
Vertex[23] =	37976,	length =	1119.56
Vertex[24] =	127033,	length =	1143.03
Vertex[25] =	27610,	length =	1223.66
Vertex[26] =	22730,	length =	1259.64
Vertex[27] =	17839,	length =	1363.75
Vertex[28] =	17843,	length =	1418.48
Vertex[29] =	106652,	length =	1502.47
Vertex[30] =	59050,	length =	1548.65
Vertex[31] =	15609,	length =	1583.67
Vertex[32] =	15612,	length =	1619.49
Vertex[33] =	57608,	length =	1665.18
Vertex[34] =	181031,	length =	1705.36
Vertex[35] =	22065,	length =	1722.62
Vertex[36] =	22071,	length =	1744.65
Vertex[37] =	93541,	length =	1793.69
Vertex[38] =	15849,	length =	1822.45
Vertex[39] =	81615,	length =	1893.41
Vertex[40] =	110636,	length =	1940.29

1.4 Astar' Trace

The only difference with Dijkstra is the number of visited vertices.

```
graph_traversal --start 86771 --end 110636 --algorithm astar --file graph_dc_area.2022-03-11.txt
```

Total visited vertex = 424

Total vertex on path from start to end = 40

Vertex[1] =	86771,	length =	0.00
Vertex[2] =	17792,	length =	51.68
Vertex[3] =	16696,	length =	227.25
Vertex[4] =	16703,	length =	279.42
Vertex[5] =	24989,	length =	333.06
Vertex[6] =	11028,	length =	383.75
Vertex[7] =	11026,	length =	448.25
Vertex[8] =	15310,	length =	480.77
Vertex[9] =	46381,	length =	515.21
Vertex[10] =	84402,	length =	563.19
Vertex[11] =	101294,	length =	611.60
Vertex[12] =	21358,	length =	707.90
Vertex[13] =	21361,	length =	749.51
Vertex[14] =	36149,	length =	773.83
Vertex[15] =	34708,	length =	819.48
Vertex[16] =	96195,	length =	863.77
Vertex[17] =	54412,	length =	895.26
Vertex[18] =	54410,	length =	926.76
Vertex[19] =	61363,	length =	967.79
Vertex[20] =	61366,	length =	1053.13
Vertex[21] =	110218,	length =	1093.06
Vertex[22] =	110217,	length =	1098.67
Vertex[23] =	37976,	length =	1119.56
Vertex[24] =	127033,	length =	1143.03
Vertex[25] =	27610,	length =	1223.66
Vertex[26] =	22730,	length =	1259.64
Vertex[27] =	17839,	length =	1363.75
Vertex[28] =	17843,	length =	1418.48
Vertex[29] =	106652,	length =	1502.47
Vertex[30] =	59050,	length =	1548.65
Vertex[31] =	15609,	length =	1583.67
Vertex[32] =	15612,	length =	1619.49
Vertex[33] =	57608,	length =	1665.18
Vertex[34] =	181031,	length =	1705.36
Vertex[35] =	22065,	length =	1722.62
Vertex[36] =	22071,	length =	1744.65
Vertex[37] =	93541,	length =	1793.69
Vertex[38] =	15849,	length =	1822.45
Vertex[39] =	81615,	length =	1893.41
Vertex[40] =	110636,	length =	1940.29