

Screen.I0.txt

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1 *****
2 * PROGRAMMED BY : Daniel Olaes & Wesley Chok
3 * CLASS          : CS1D
4 * SECTION        : MW: 2:30 P.M.
5 * ASSIGNMENT #9 : DFS & BFS
6 *****
7
8 Part A - This part will demonstrate DFS starting
9 at Chicago (choosing the edge with the smallest
10 mileage) using an adjacency list. The discovery
11 edges and the back edges will be identified as
12 well. Part B - This part will demonstrate BFS
13 starting at Chicago (choosing the edge with the
14 smallest mileage) using an adjacency matrix. The
15 discovery edges and the cross edges will be
16 identified as well.
17
18 PART A - DFS (Adjacency List):
19
20 DFS Traversal:
21 Chicago
22 Kansas City
23 Dallas
24 Houston
25 Atlanta
26 Miami
27 New York
28 Boston
29 Los Angeles
30 San Francisco
31 Seattle
32 Denver
33
34 Total Distance Traveled: 7795 miles.
35
36 Discovery Edges:
37 Chicago->Kansas City
38 Kansas City->Dallas
39 Dallas->Houston
40 Houston->Atlanta
41 Atlanta->Miami
42 Atlanta->New York
43 New York->Boston
44 Dallas->Los Angeles
45 Los Angeles->San Francisco
46 San Francisco->Seattle
47 Seattle->Denver
48
49 Back Edges:
50 Houston->Dallas
51 Miami->Atlanta
52 Miami->Houston
53 Atlanta->Dallas
54 Atlanta->Houston
55 Atlanta->Kansas City
56 Boston->New York
57 Boston->Chicago
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58 New York->Chicago
59 New York->Atlanta
60 New York->Kansas City
61 Houston->Miami
62 Dallas->Kansas City
63 Dallas->Atlanta
64 San Francisco->Los Angeles
65 Seattle->San Francisco
66 Denver->Kansas City
67 Denver->Chicago
68 Denver->Los Angeles
69 Denver->San Francisco
70 Denver->Seattle
71 Seattle->Chicago
72 San Francisco->Denver
73 Los Angeles->Denver
74 Los Angeles->Dallas
75 Los Angeles->Kansas City
76 Kansas City->Chicago
77 Kansas City->Denver
78 Kansas City->Atlanta
79 Kansas City->New York
80 Kansas City->Los Angeles
81 Chicago->New York
82 Chicago->Boston
83 Chicago->Denver
84 Chicago->Seattle
85
86 PART B - BFS (Adjacency Matrix):
87
88 BFS Traversal:
89 Chicago
90 Kansas City
91 New York
92 Boston
93 Denver
94 Seattle
95 Dallas
96 Atlanta
97 Los Angeles
98 San Francisco
99 Houston
100 Miami
101
102 Total Distance Traveled: 10593 miles.
103
104 Discovery Edges:
105 Chicago->Kansas City
106 Chicago->New York
107 Chicago->Boston
108 Chicago->Denver
109 Chicago->Seattle
110 Kansas City->Dallas
111 Kansas City->Atlanta
112 Kansas City->Los Angeles
113 Denver->San Francisco
114 Dallas->Houston
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115 Atlanta->Miami
116
117 Back Edges:
118 Kansas City->Chicago
119 Kansas City->Denver
120 Kansas City->New York
121 New York->Boston
122 New York->Chicago
123 New York->Atlanta
124 New York->Kansas City
125 Boston->New York
126 Boston->Chicago
127 Denver->Kansas City
128 Denver->Chicago
129 Denver->Los Angeles
130 Denver->Seattle
131 Seattle->San Francisco
132 Seattle->Denver
133 Seattle->Chicago
134 Dallas->Kansas City
135 Dallas->Atlanta
136 Dallas->Los Angeles
137 Atlanta->Dallas
138 Atlanta->Houston
139 Atlanta->Kansas City
140 Atlanta->New York
141 Los Angeles->San Francisco
142 Los Angeles->Denver
143 Los Angeles->Dallas
144 Los Angeles->Kansas City
145 San Francisco->Los Angeles
146 San Francisco->Seattle
147 San Francisco->Denver
148 Houston->Dallas
149 Houston->Atlanta
150 Houston->Miami
151 Miami->Atlanta
152 Miami->Houston