

Functions	
Brendon Burd	Christian Henry
sourceNode(nodeArray)	csvToArray(fileName)
nodeArray(array)	printArray2D(array)
getNeighbors(source, nodeAr, array)	visitedDict(array, source)
dvr(array, nodeAr, source)	alphabetize(array)
cleanOutputDVR(distDict, source)	dijkstra(array)
	cleanOutputDijkstra(shortest, prev, nodeAr, source)

Instructions:

1. Open terminal shell
2. cd to directory where .py file is located
3. Move topology file to same directory
4. Run the command "python project.py topology.csv"
5. Type in one of the following nodes: [u,w,v,x,y,z]

Screenshots:

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CSC450-Project -- zsh -- 80x24
Last login: Sun Feb 20 16:47:40 on ttys001
(base) christianhenry@Christians-MBP ~ % cd Documents
(base) christianhenry@Christians-MBP Documents % cd GitHub
(base) christianhenry@Christians-MBP GitHub % cd CSC450-Project
(base) christianhenry@Christians-MBP CSC450-Project % python project.py topology|
.csv
Please, provide the source node: u
Shortest path tree for node u:
uw, ux, uvw, uvvy, uvvyz
Costs of the least-cost paths for node u:
u:0, v:6, w:3, x:5, y:10, z:12

Distance vector for node u: 0 6 3 5 10 12
Distance vector for node v: 6 0 3 7 4 6
Distance vector for node w: 3 3 0 4 7 9
Distance vector for node x: 5 7 4 0 7 9
Distance vector for node y: 10 4 7 7 0 2
Distance vector for node z: 12 6 9 9 2 0
(base) christianhenry@Christians-MBP CSC450-Project % python project.py topology|
.csv
Please, provide the source node: x
Shortest path tree for node x:
xu, xw, xy, xz, xwv
Costs of the least-cost paths for node x:
u:5, v:7, w:4, x:0, y:7, z:9

Distance vector for node u: 0 6 3 5 10 12
Distance vector for node v: 6 0 3 7 4 6
Distance vector for node w: 3 3 0 4 7 9
Distance vector for node x: 5 7 4 0 7 9
Distance vector for node y: 10 4 7 7 0 2
Distance vector for node z: 12 6 9 9 2 0
(base) christianhenry@Christians-MBP CSC450-Project %

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