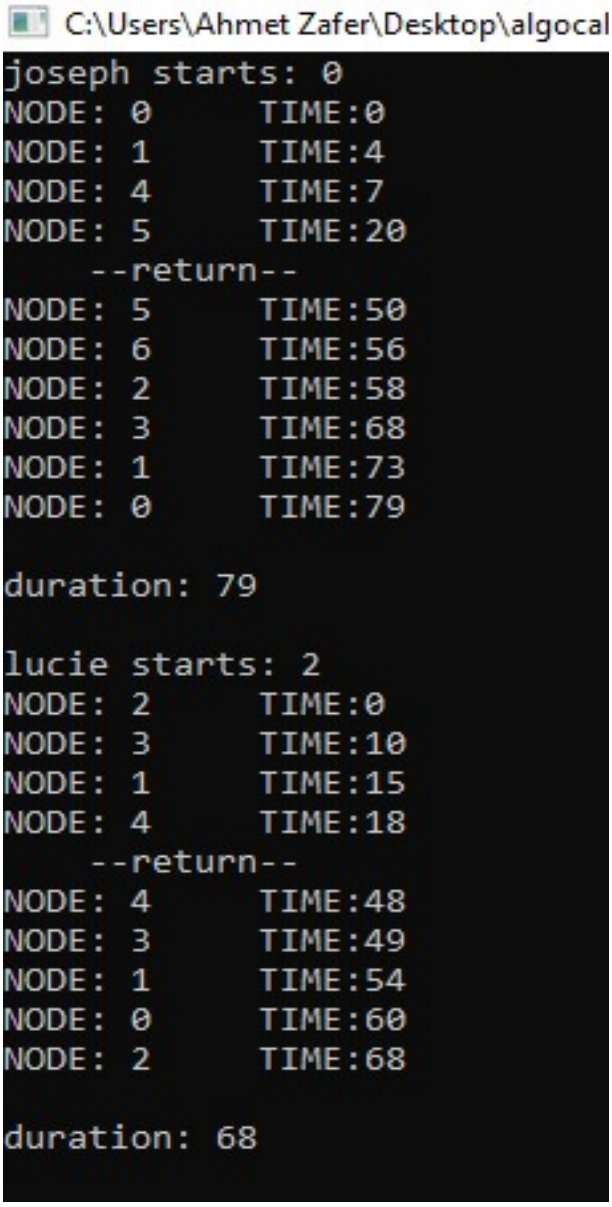
Ahmet Zafer SAĞLIK 150160519

What is Dijkstra's algorithm.?

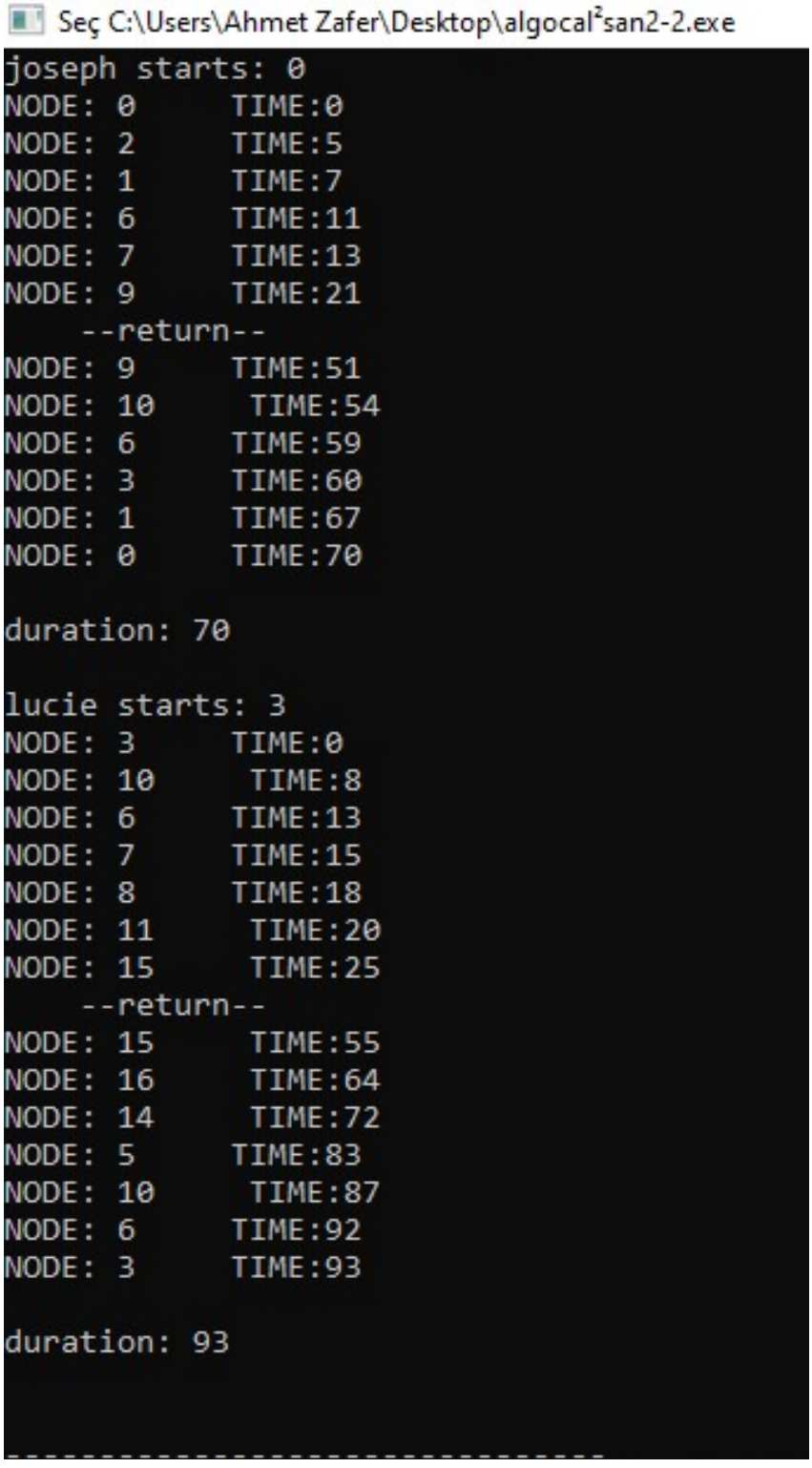
One algorithm for finding the shortest path from a starting node to a target node in a weighted graph is Dijkstra's algorithm. The algorithm creates a tree of shortest paths from the starting vertex, the source, to all other points in the graph..

In the algorithm all we are looking from nodes perspective.We calculate for each node which neighbor nodes are closer.Then we are finding our path from src to dest by using this infos.

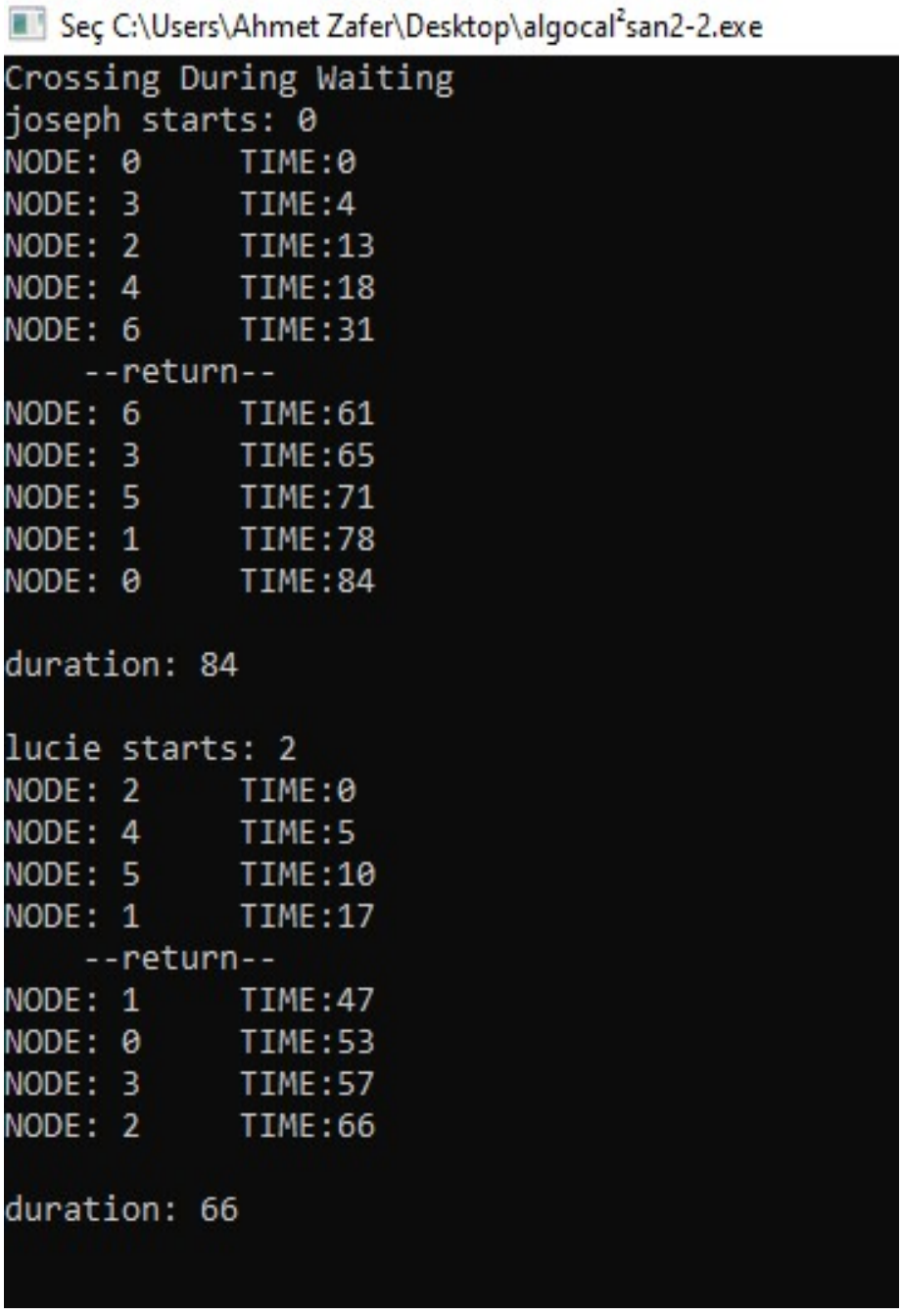
Test 1



Test 2

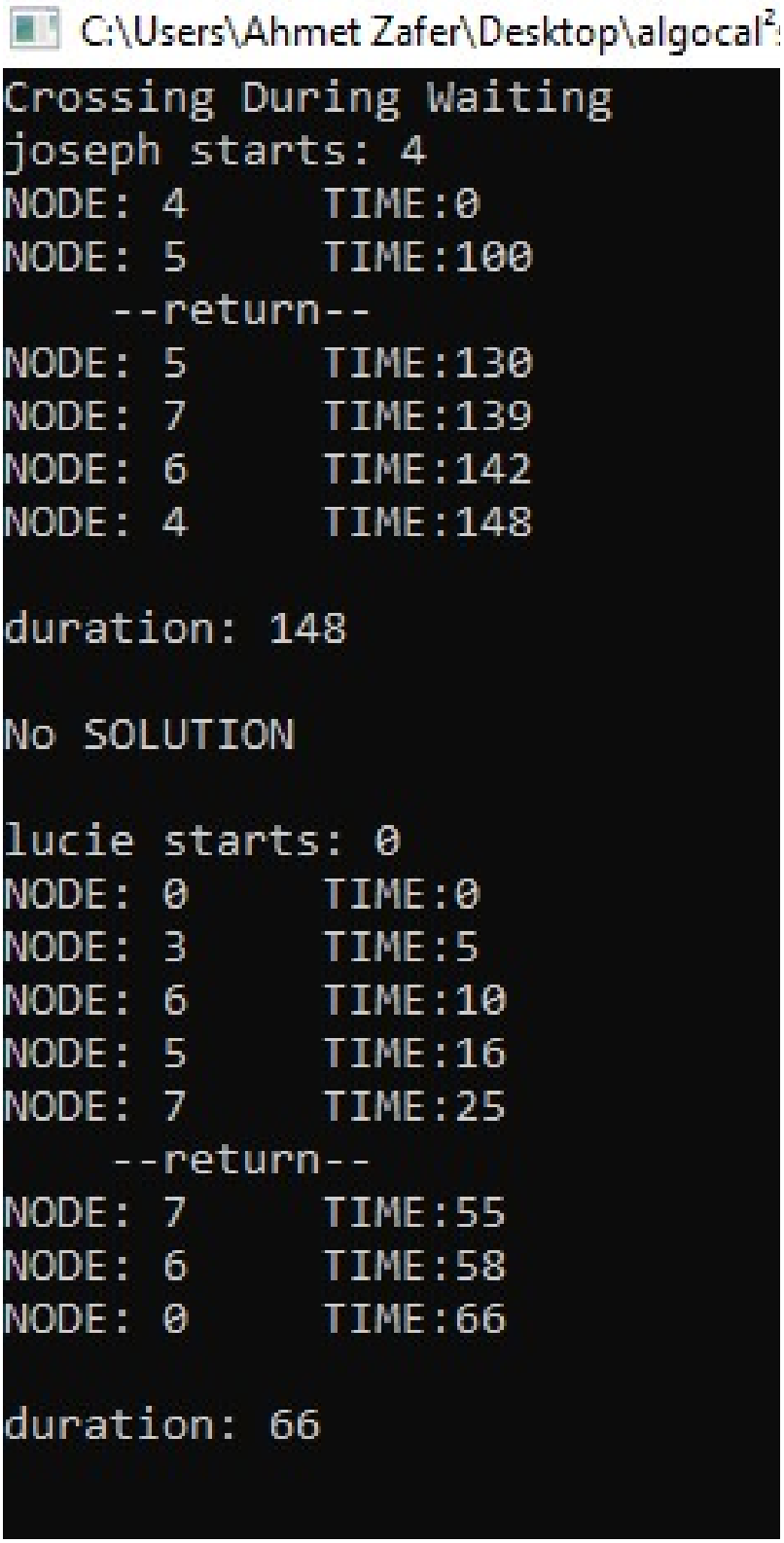

Seç C:\Users\Ahmet Zafer\Desktop\algocal²san2-2.exe
joseph starts: 0
NODE: 0 TIME:0
NODE: 2 TIME:5
NODE: 1 TIME:7
NODE: 6 TIME:11
NODE: 7 TIME:13
NODE: 9 TIME:21
--return--
NODE: 9 TIME:51
NODE: 10 TIME:54
NODE: 6 TIME:59
NODE: 3 TIME:60
NODE: 1 TIME:67
NODE: 0 TIME:70
duration: 70
lucie starts: 3
NODE: 3 TIME:0
NODE: 10 TIME:8
NODE: 6 TIME:13
NODE: 7 TIME:15
NODE: 8 TIME:18
NODE: 11 TIME:20
NODE: 15 TIME:25
--return--
NODE: 15 TIME:55
NODE: 16 TIME:64
NODE: 14 TIME:72
NODE: 5 TIME:83
NODE: 10 TIME:87
NODE: 6 TIME:92
NODE: 3 TIME:93
duration: 93

Test 3


Seç C:\Users\Ahmet Zafer\Desktop\algocal²san2-2.exe
Crossing During Waiting
joseph starts: 0
NODE: 0 TIME:0
NODE: 3 TIME:4
NODE: 2 TIME:13
NODE: 4 TIME:18
NODE: 6 TIME:31
--return--
NODE: 6 TIME:61
NODE: 3 TIME:65
NODE: 5 TIME:71
NODE: 1 TIME:78
NODE: 0 TIME:84
duration: 84
lucie starts: 2
NODE: 2 TIME:0
NODE: 4 TIME:5
NODE: 5 TIME:10
NODE: 1 TIME:17
--return--
NODE: 1 TIME:47
NODE: 0 TIME:53
NODE: 3 TIME:57
NODE: 2 TIME:66
duration: 66

No solution(Every time ı chanced a node it is finding another way to cross so No Solution)

Test 4



No solution(When ı chance the path there is no other optional way)

Test 5