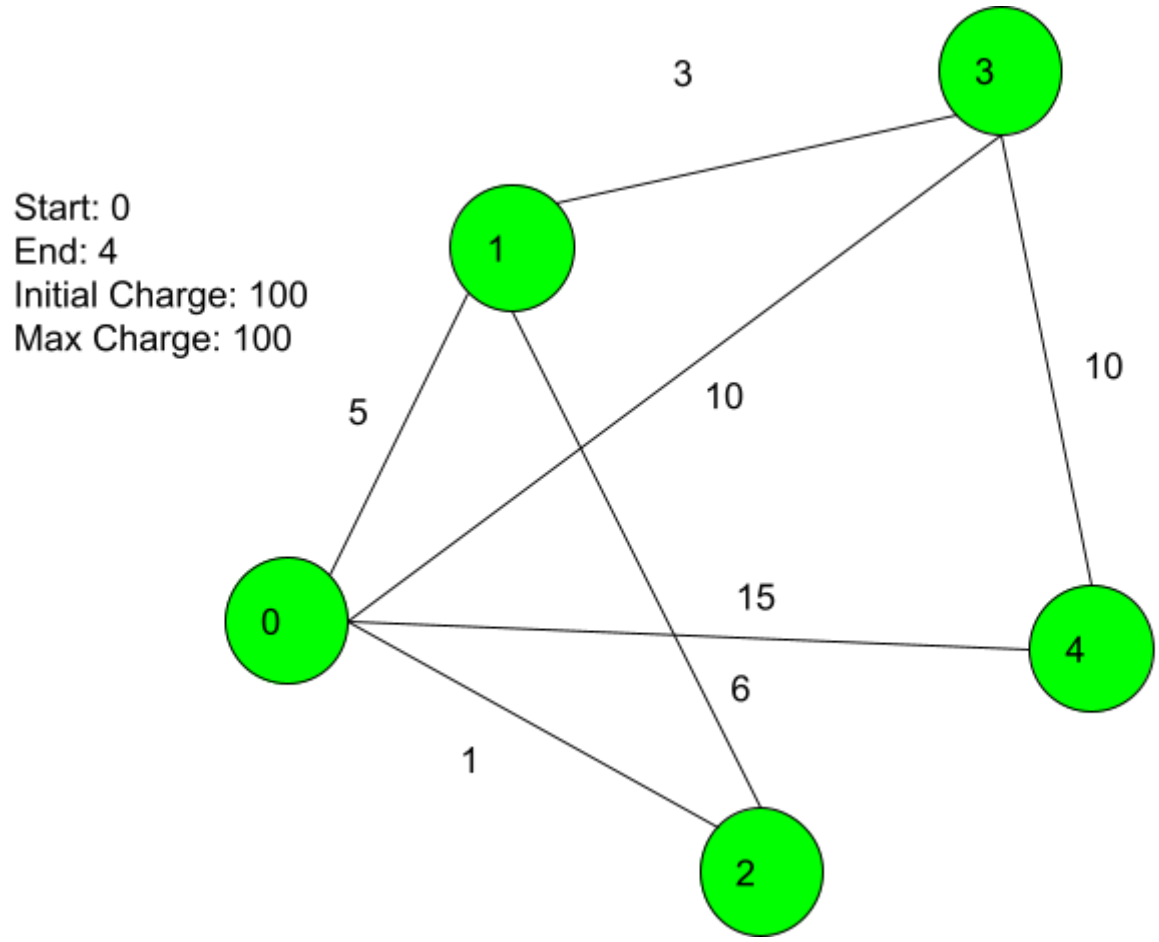
Aidan Murphree

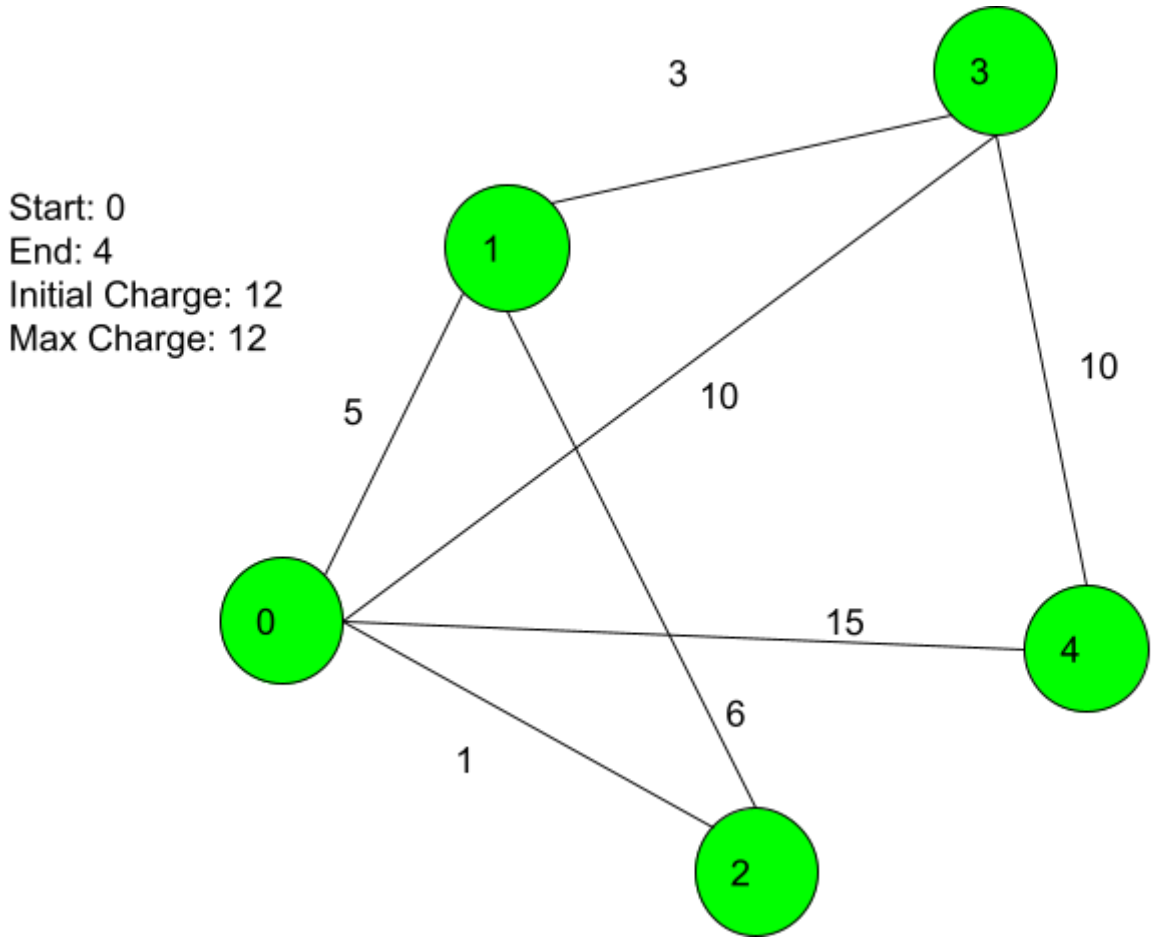
Test 1: When the algorithm is given a graph of all chargers, it simply finds the shortest path.



Expected Output:

Verify Path: 1
15: 0 4

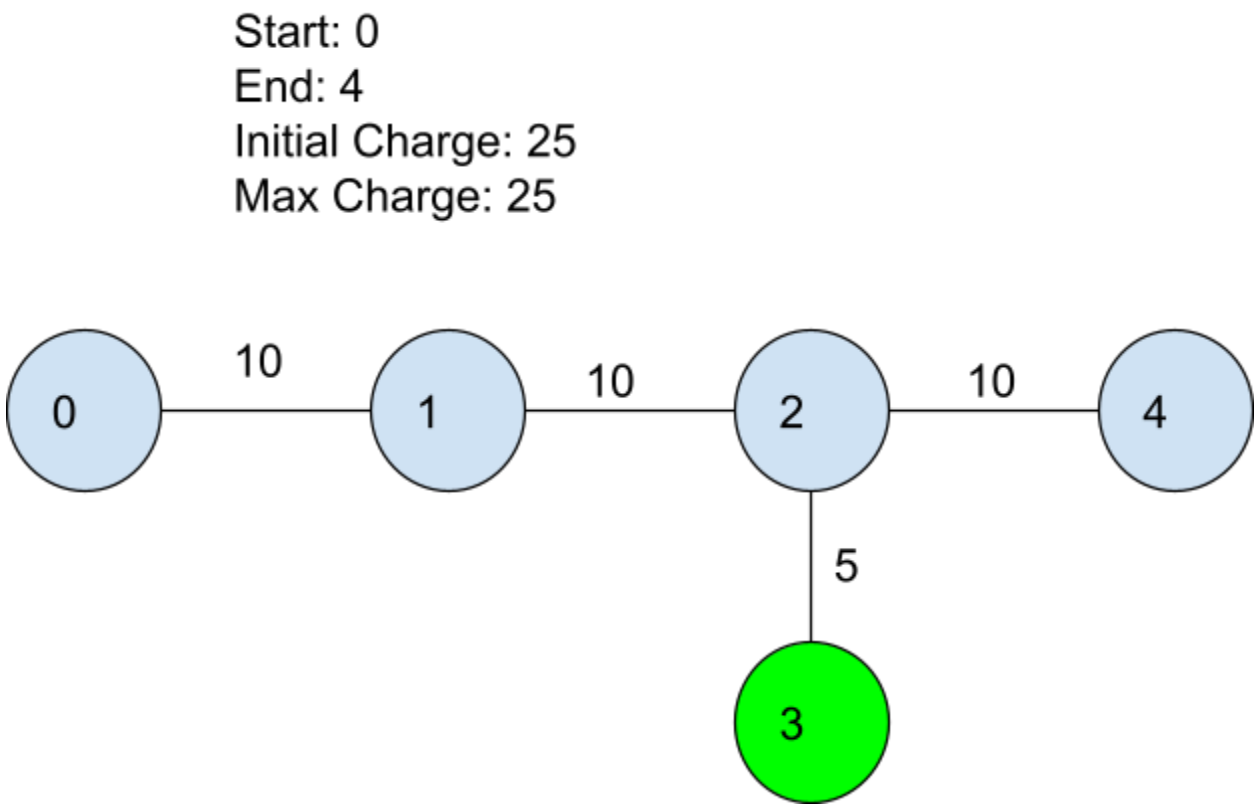
Test 2: Doesn't take the shortest path if the range isn't high enough



Expected Output:

Verify Path: 1
18: 0 1 3 4

Test 3: Can double back if need be to refill charge

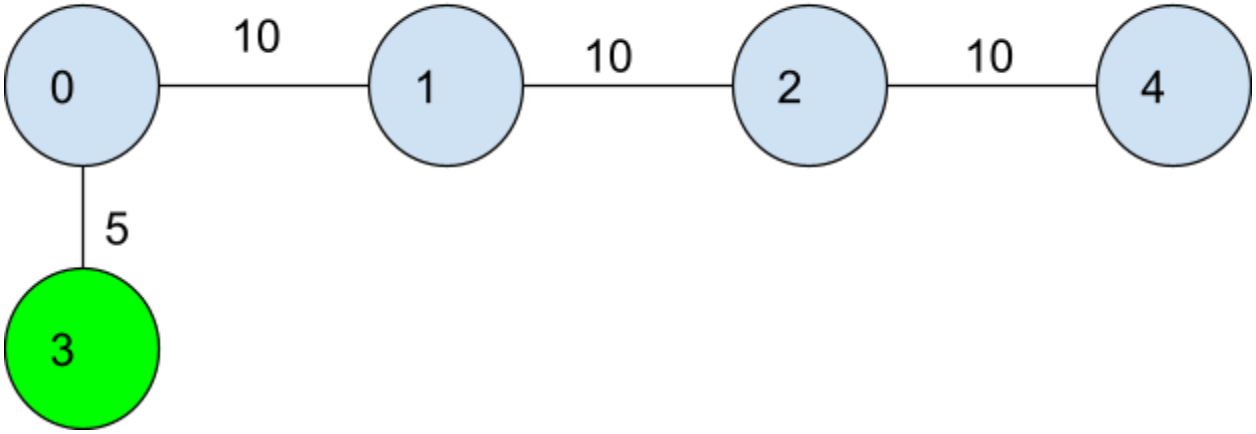


Expected Output:

Verify Path: 1
40: 0 1 3 2 4

Test 4: Will go to a charger first if initial charge isn't enough to get there

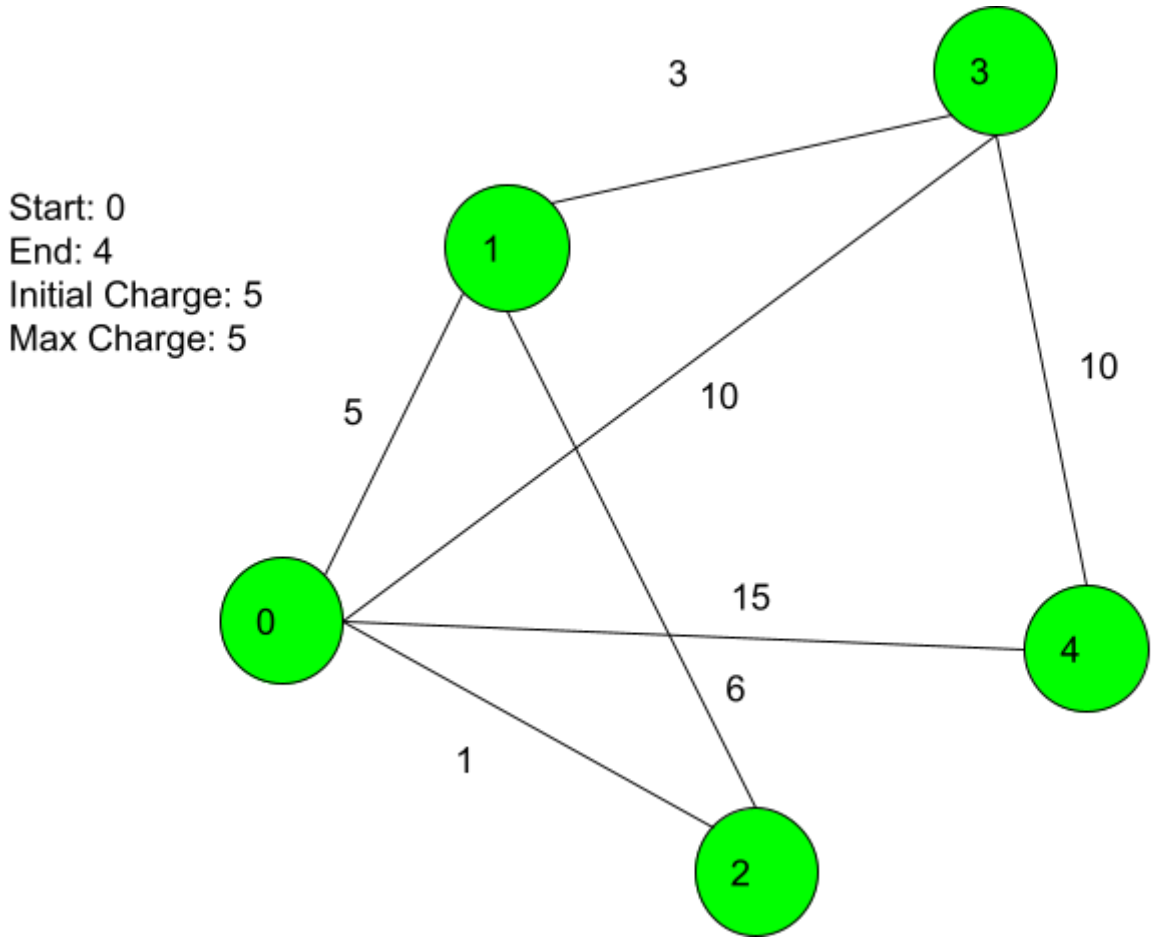
Start: 0
End: 4
Initial Charge: 10
Max Charge: 40



Expected Output:

Verify Path: 1
40: 0 3 0 1 2 4

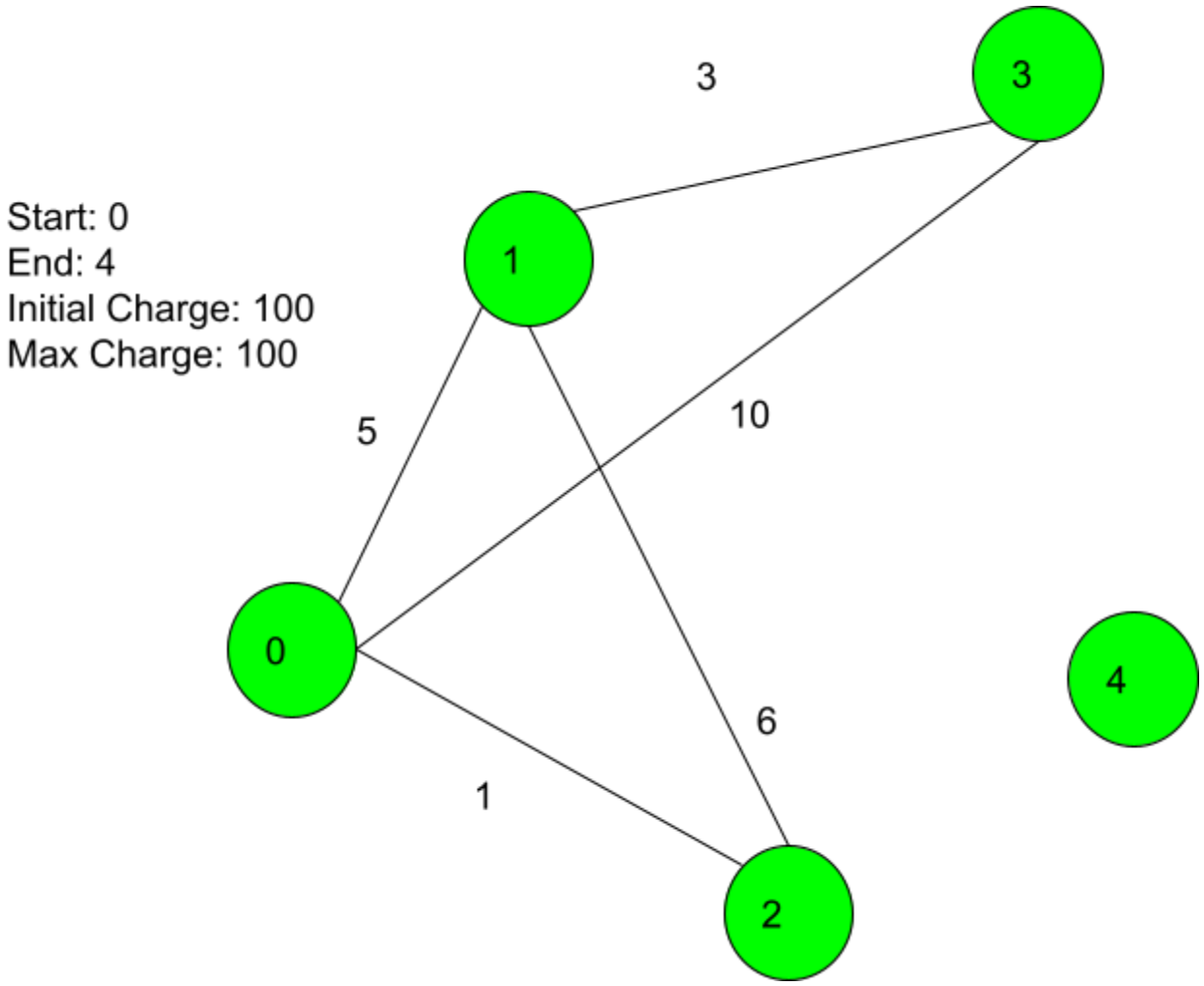
Test 5: It fails if the max charge isn't enough for some leg of the path.



Expected Output:

No suitable path from 0 to 4 exists

Test 6: It fails if the end point isn't connected at all.



Expected Output:

No suitable path from 0 to 4 exists