

```

25 function mod_Dijkstra(Graph, source):
26     //This pseudocode is taken from wikipedia so as to modify it for our purposes.
27     //Source: https://en.wikipedia.org/wiki/Dijkstra%27s\_algorithm
28     //Instead of minimizing path length, minimizes fluctuation. Same run time.
29
30     create vertex set Q
31
32     for each vertex v in Graph:
33         fluc[v] ← INFINITY //modified line
34         prev[v] ← UNDEFINED
35         add v to Q
36     fluc[source] ← 0
37
38     while Q is not empty:
39         u ← vertex in Q with min fluc[u]
40
41         remove u from Q
42
43         for each neighbor v of u:
44             if prev[u] exists: //inserted line
45                 alt ← fluc[u] + |length(u, v) - length(prev[u], u)| //modified line
46             else: //inserted line
47                 alt ← fluc[u] //inserted line
48
49             if alt < fluc[v]:
50                 fluc[v] ← alt
51                 prev[v] ← u
52                 if prev[u] exists: //inserted line
53                     fluc[v] += |length(u, v) - length(prev[u], u)| //inserted line
54
55     return fluc[], prev[]

```