

DIJKSTRA(G, w, s)

 INIT-SINGLE-SOURCE(G, s)

$S = \emptyset$

$Q = G.V$ // i.e., insert all vertices into Q

while $Q \neq \emptyset$

$u = \text{EXTRACT-MIN}(Q)$

$S = S \cup \{u\}$

for each vertex $v \in G.Adj[u]$

 RELAX(u, v, w)