

Dijkstra

DIJKSTRA(G, s):

for each node v in G except s

$d(v) = \infty$

$\text{pred}(v) = \text{null}$

$d(s) = 0$

let Q be a priority queue containing the nodes of G
 prioritized by d -value

let C be an empty set

while Q is not empty

$u = \text{removeMin}(Q)$

$C = C \cup \{u\}$

foreach neighbor v of u

 // Relax (u, v)

if $d(v) > d(u) + w(u, v)$

$d(v) = d(u) + w(u, v)$

$\text{pred}(v) = u$

return pred

























