## Dijkstra

```
DIJKSTRA(G,s):
for each node v in G except s
  d(V) = \infty
  pred(v) = 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 = removeMin(0)
  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)
      pred(v) = u
return pred
```





















