# Shortest Paths in DAGs

```
DagShortestPaths(G,s):

    topologically sort the nodes of G

    // Initialization
    foreach node v in G
    │   d(v) = ∞
    │   pred(v) = null
    d(s) = 0

    foreach node u in G in topological order
    │   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
```