

BELLMAN FORD

Algorithm BellmanFord(v , $cost$, $dist$, n)

```
{
  for  $i := 1$  to  $n$  do
     $dist[i] := cost[v, i]$ ;
  for  $k := 2$  to  $n-1$  do
  {
    for each  $u$  such that  $u \neq v$  and  $u$ 
    has at least one incoming edge do
    {
      for each  $(i, u)$  in the graph do
      {
        if( $dist[u] > (dist[i] + cost[i, u])$ ) then
           $dist[u] := dist[i] + cost[i, u]$ ;
        }
      }
    }
  }
}
```