

 Review the assignment due date

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## DIJKSTRA( $V, E, w, s$ )

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1 partition  $V - \{s\}$  into  $V_i$  for  $i = 0, \dots, p - 1$ 
2 partition  $w$  into  $w_i$  for  $i = 0, \dots, p - 1$ 
3  $S = \emptyset$ 
4 for all  $v \in V_i - S_i$  do
5      $d[v] = w_i(s, v)$ 
6 while  $S_i \neq V_i$  do
7     find a vertex  $u_i$  such that  $d[u_i] = \min \{d[v] | v \in V_i - S_i\}$ 
8     reduce  $u_i$  to find the minimum value  $d[u]$ 
9     broadcast  $u$  and  $d[u]$ 
10    if  $u \in V_i$  then
11         $S_i = S_i \cup \{u\}$ 
12    for all  $v \in V_i - S_i$  do
13         $d[v] = \min \{d[v], d[u] + w_i(u, v)\}$ 
14 Gather  $d$  to build complete  $d$ 
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