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1  Algorithm Kruskal( $E, cost, n, t$ )
2  //  $E$  is the set of edges in  $G$ .  $G$  has  $n$  vertices.  $cost[u, v]$  is the
3  // cost of edge  $(u, v)$ .  $t$  is the set of edges in the minimum-cost
4  // spanning tree. The final cost is returned.
5  {
6      Construct a heap out of the edge costs using Heapify;
7      for  $i := 1$  to  $n$  do  $parent[i] := -1$ ;
8      // Each vertex is in a different set.
9       $i := 0$ ;  $mincost := 0.0$ ;
10     while  $((i < n - 1)$  and (heap not empty)) do
11     {
12         Delete a minimum cost edge  $(u, v)$  from the heap
13         and reheapify using Adjust;
14          $j := \text{Find}(u)$ ;  $k := \text{Find}(v)$ ;
15         if  $(j \neq k)$  then
16         {
17              $i := i + 1$ ;
18              $t[i, 1] := u$ ;  $t[i, 2] := v$ ;
19              $mincost := mincost + cost[u, v]$ ;
20             Union $(j, k)$ ;
21         }
22     }
23     if  $(i \neq n - 1)$  then write ("No spanning tree");
24     else return  $mincost$ ;
25 }
```