Kruskal's Algorithm

MST-KRUSKAL(G, w)

 1 $A = \emptyset$
 2 **for** each vertex $v \in G.V$
 3   MAKE-SET(v)
 4 create a single list of the edges in $G.E$
 5 sort the list of edges into monotonically increasing order by weight w
 6 **for** each edge (u, v) taken from the sorted list in order
 7   **if** FIND-SET(u) $\neq$ FIND-SET(v)
 8          $A = A \cup \{(u, v)\}$
 9   UNION(u, v)
10 **return** A