

Kruskal's Algorithm

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KRUSKAL( $G, w$ )  
   $A = \emptyset$   
  for each vertex  $v \in G.V$   
    MAKE-SET( $v$ )  
  sort the edges of  $G.E$  into nondecreasing order by weight  $w$   
  for each  $(u, v)$  taken from the sorted list  
    if FIND-SET( $u$ )  $\neq$  FIND-SET( $v$ )  
       $A = A \cup \{(u, v)\}$   
      UNION( $u, v$ )  
  return  $A$ 
```