

# Kruskal's Algorithm

| Priority Queue:              | Heap | Sorted Array |
|------------------------------|------|--------------|
| <b>Building</b><br>:6-8      |      |              |
| <b>Each removeMin</b><br>:13 |      |              |

```
1 KruskalMST(G) :
2   DisjointSets forest
3   foreach (Vertex v : G) :
4     forest.makeSet(v)
5
6   PriorityQueue Q    // min edge weight
7   foreach (Edge e : G) :
8     Q.insert(e)
9
10  Graph T = (V, {})
11
12  while |T.edges()| < n-1:
13    Vertex (u, v) = Q.removeMin()
14    if forest.find(u) != forest.find(v) :
15      T.addEdge(u, v)
16      forest.union( forest.find(u) ,
17                  forest.find(v) )
18
19  return T
```