

# Dijkstra's Algorithm (SSSP)

伪代码：

```
1 DijkstraSSSP(G, s)
2   foreach (Vertex v : G):
3     d[v] = +inf
4     p[v] = NULL
5   d[s] = 0
6
7   PriorityQueue Q // min distance, defined by d[v]
8   Q.buildHeap(G.vertices())
9   Graph T          // "labeled set"
10
11  repeat n times:
12    Vertex u = Q.removeMin()
13    T.add(u)
14    foreach (Vertex v: neighbors of u not in T):
15      if cost(u, v) + d[u] < d[v]:
16        d[v] = cost(u, v) + d[u]
17        p[v] = u
```

## 时间复杂度

和Prim的最小生成树一样

# Floyd-Warshall's Algorithm