

```
1  /*
2   | Dijkstra |
3   Desc: Single-source shortest path in  $O(n \log(n))$ 
4   Source: KawakiMeido
5   State: Untested lmao
6  */
7
8  void dijkstra(int s, int dist[]){
9      for (int i=1; i≤n; i++){
10         dist[i] = INF;
11     }
12     priority_queue<pii,vector<pii>,greater<pii>> pq;
13     dist[s] = 0;
14     pq.push({0,s});
15     while (!pq.empty()){
16         int u = pq.top().se;
17         int d = pq.top().fi;
18         pq.pop();
19
20         if (d > dist[u]) continue;
21
22         for (auto in:a[u]){
23             int v = in.fi;
24             int delta = in.se;
25             if (dist[v] > d+delta){
26                 dist[v] = d+delta;
27                 pq.push({d+delta,v});
28             }
29         }
30     }
31 }
```