

Algoritmo di Prim

Pseudocodice*

Algoritmo 1 Prim(G, r)

Prim(G, r)

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1: for each  $u \in V[G]$  do
2:    $d[u] \leftarrow \infty$ 
3:    $\pi[u] \leftarrow \text{NIL}$ 
4: end for
5:  $d[r] \leftarrow 0$ 
6:  $Q \leftarrow V[G]$ 
7: while  $Q \neq \emptyset$  do
8:    $u \leftarrow \text{ExtractMin}(Q)$ 
9:   for all  $v \in \text{Adj}[u]$  do
10:    if  $v \in Q$  and  $w(u, v) < d[v]$  then
11:       $d[v] \leftarrow w(u, v)$ 
12:       $\pi[v] \leftarrow u$ 
13:    end if
14:  end for
15: end while
```

*T. H. Cormen, C. E. Leiserson, R. L. Rivest e C. Stein. *Introduction to Algorithms*. MIT Press, Second Edition, 2001.