## Algorithm 1 The Bellman-Kalaba algorithm

```
1: procedure BellmanKalaba(G, u, l, p)
        for all v \in V(G) do
 2:
             l(v) \leftarrow \infty
 3:
        end for
 4:
        l(u) \leftarrow 0
 5:
        repeat
 6:
 7:
             for i \leftarrow 1, n do
                 min \leftarrow l(v_i)
 8:
                 for j \leftarrow 1, n \ \mathbf{do}
 9:
                     if min > e(v_i, v_j) + l(v_j) then
10:
                         min \leftarrow e(v_i, v_j) + l(v_j)
11:
12:
                         p(i) \leftarrow v_i
                     end if
13:
                 end for
14:
                 l(i) \leftarrow min
15:
             end for
16:
             changed \leftarrow l \neq l
17:
18:
             l \leftarrow l
        \mathbf{until} \neg changed
19:
20: end procedure
21: procedure FINDPATHBK(v, u, p)
        if v = u then
22:
             Write v
23:
        else
24:
25:
             w \leftarrow v
             while w \neq u do
26:
                 Write w
27:
                 w \leftarrow p(w)
28:
             end while
29:
        end if
31: end procedure
```