Algorithm 1 Computation of the lcp-table from the suffix array and its inverse.

1: $\ell \leftarrow 0$
2: **for** $i \leftarrow 0$ **upto** $n - 1$ **do**
3:     $j \leftarrow \mathsf{SUF}^{-1}[i]$
4:     **if** $j > 0$ **then**
5:         $k \leftarrow \mathsf{SUF}[j - 1]$ $\triangleright$ $S_{\mathsf{SUF}[k]}$ directly precedes $S_{\mathsf{SUF}[i]}$ in SUF
6:         $\ell \leftarrow \max\{\ell - 1, 0\}$ $\triangleright$ common prefix of length $\geq \ell - 1$
7:         **while** $S[k + \ell] = S[i + \ell]$ **do**
8:             $\ell \leftarrow \ell + 1$
9:         **end while**
10:       $\mathsf{LCP}[j] \leftarrow \ell$
11:     **end if**
12: **end for**