

Initial State:

$i$ :	0	1	2	3	4	5	6	7	8	9	10	11	12	13
$x[i]$ :	2	1	3	1	3	1	2	1	3	1	3	1	2	1
$sa[i]$ :	13	11	5	9	3	7	1	12	6	0	10	4	8	2
$lcp[i]$ :	0	1	3	1	5	3	7	0	2	8	0	4	2	6

S1:

$$fp[0] = fp[-1] \cdot 101 + x[0] \bmod 197 = 2,$$

$$fp[1] = fp[0] \cdot 101 + x[1] \bmod 197 = 6,$$

$$fp[1] = fp[1] \cdot 101 + x[2] \bmod 197 = 18,$$

...

$$fp[i]: \quad 2 \quad 6 \quad 18 \quad 46 \quad 118 \quad 99 \quad 151 \quad 83 \quad 112 \quad 84 \quad 16 \quad 41 \quad 6 \quad 16$$

S2:

$$\left. \begin{aligned} \text{fp}(sa[1], sa[1] + lcp[1] - 1) &= fp(11) - fp(10) \cdot 101^1 \bmod 197 = 1 \\ \text{fp}(sa[0], sa[0] + lcp[1] - 1) &= fp(13) - fp(12) \cdot 101^1 \bmod 197 = 1 \end{aligned} \right\} \text{identical,}$$

$$\left. \begin{array}{l} x[sa[1] + lcp[1]] = x[12] = 2 \\ x[sa[0] + lcp[1]] = x[14] = null \end{array} \right\} \text{different, set } mk[sa[1]] \text{ to } 1,$$

$$\left. \begin{aligned} \text{fp}(sa[2], sa[2] + lcp[2] - 1) &= fp(7) - fp(4) \cdot 101^3 \bmod 197 = 160 \\ \text{fp}(sa[1], sa[1] + lcp[2] - 1) &= fp(13) - fp(10) \cdot 101^3 \bmod 197 = 160 \end{aligned} \right\} \text{identical,}$$

$$\left. \begin{array}{l} x[sa[2] + lcp[2]] = x[8] = 1 \\ x[sa[1] + lcp[2]] = x[14] = null \end{array} \right\} \text{different, set } mk[sa[2]] \text{ to } 1$$

$$\left. \begin{aligned} \text{fp}(sa[3], sa[3] + lcp[3] - 1) &= fp(9) - fp(8) \cdot 101^1 \bmod 197 = 1 \\ \text{fp}(sa[2], sa[2] + lcp[3] - 1) &= fp(5) - fp(4) \cdot 101^1 \bmod 197 = 1 \end{aligned} \right\} \text{identical,}$$

$$\left. \begin{array}{l} x[sa[3] + lcp[3]] = x[10] = 3 \\ x[sa[2] + lcp[3]] = x[6] = 2 \end{array} \right\} \text{different, set } mk[sa[3]] \text{ to } 1,$$

...

set  $mk[sa[0]]$  to 1

[illegible]