

Algorithm 2 T-CBF ELEMENT INSERTION

for $i = 1$ *to* k **do**

Access position $f_i(x)$ and read c_1, c_2

if $c_1 < L$ **then**

$c_1 = v_{g_i}(x)$

if $c_2 == 0$ **then**

$c_2 = w_{h_i}(x)$

else if $c_1 < 2L$ **then**

if $c_2 < L$ **then**

if $v_{g_i}(x) - L + 1 < L$ **then**

$c_2 = v_{g_i}(x) - L + 1$

else if $c_1 - L + 1 < L$ **then**

$c_2 = c_1 - L + 1$

else

$c_2 = 1$

$c_1 = c_1 + v_{g_i}(x)$

else

$c_1 = c_1 + v_{g_i}(x)$

if $c_2 \in [1, L - 1]$ **then**

$c_2 = 0$