

Definition: A triple $(l, i, j) \in N_n^3$ is an lcp-interval if

1. $i < j$
2. $lcptab[i] < l$
3. $\forall k, i+1 \leq k \leq j : lcptab[k] \geq l$
4. $\exists k, i+1 \leq k \leq j : lcptab[k] = l$
5. $lcptab[j+1] < l$

Definition: A lcp-interval (l', i', j') is said to be *embedded* in lcp-interval (l, i, j) if $i \leq i' < j' \leq j \wedge l' > l$. Lcp-interval (l, i, j) is then called the interval *enclosing* (l', i', j') . If (l, i, j) encloses (l', i', j') and there is no interval embedded in (l, i, j) that also encloses (l', i', j') , then (l', i', j') is called a *child interval* of (l, i, j) .

Definition: Let S be string of length n . A triple $(p_1, p_2, l) \in N_n^3$ is called *repeat* if

1. $p_1 + l - 1 < n \wedge p_2 + l - 1 < n$
2. $S[p_1..p_1+l-1] = S[p_2..p_2+l-1]$

A repeat (p_1, p_2, l) is called *left maximal* if $LC(p_1) \neq LC(p_2) \vee LC(p_1) = \emptyset$.

A repeat (p_1, p_2, l) is called *right maximal* if $S[p_1+l] \neq S[p_2+l] \vee S[p_1+l] = \$$.

A repeat is called *maximal* if it is left and right maximal.