v = a node in keyword tree k

L(v) = concatanation of chars from root to v. (label of v)

$l_p(v)$ = length of the longest proper suffix of string L(v) that is also prefix of some pattern in P. Let this substring be α.

lemma: there is a unique node in the keyword tree that is labeled by string α. Let this node be n_v. Note that n_v can be the root.

the ordered pair (v, n_v) is called a <u>failure link</u>