Case 1:

Our approach is based upon the following observation:

$$T$$
  $S_1$   $S_2$   $P_1$   $P_2$ 

Let S be a substring of T.

If there exists a suffix  $S_2$  of S and a suffix  $P_2$  of P

If there exists a suffix  $S_2$  of S and a suffix  $P_2$  of P such that  $d(S_2, P_2) = 0$ , and  $d(S_1, P_1) \leq k$ ,

we have  $d(S, P) \leq k$ .