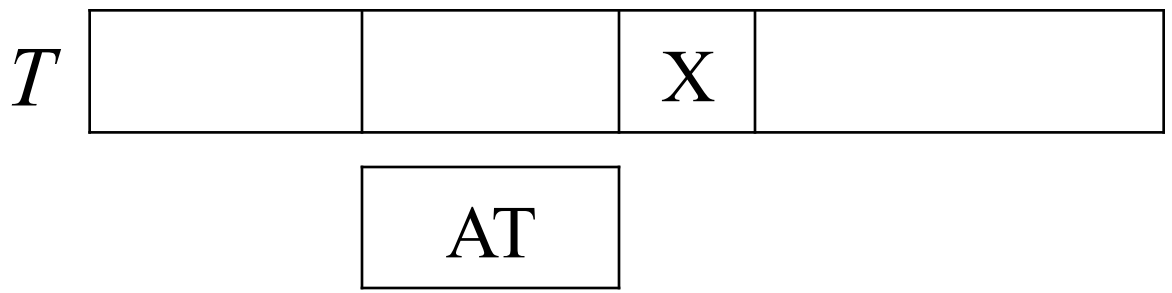
Suppose we have P = ATCCTC with k = 2.

We divide P into three pieces : p_1 = AT, p_2 = CC and p_3 = TC.

To search for exact matching, we actually perform an exhaustive search. Let us assume that we search for AT.



Note that there are three cases:

Case 1 : X = A. We move AT 2 steps.

Case 2 : X = T. We move AT 1 steps.

Case 3 : X≠A and X≠T, we move AT 3 steps.