Algorithm QUERY_INTERSECT
Input: Sorted list of corpus locations matching source language pattern $a\alpha$: $M_{a\alpha}$
Input: Sorted list of corpus locations matching source language pattern αb: $M_{\alpha b}$

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 1: function QUERY_INTERSECT(M_{aα}, M_{αb})
 2:     M_{aαb} ← ∅                          ▷ Result list is initially empty
 3:     I ← |M_{aα}|        ▷ Number of instances of pattern aα in the source corpus
 4:     J ← |M_{αb}|        ▷ Number of instances of pattern αb in the source corpus
 5:     j ← 0
 6:     i ← 0
 7:     while i < I and j < J do
 8:                                          ▷ Ignore elements in M_{αb} that are
 9:                                          ▷ too distant to intersect with M_{aα}[i]
10:         while j < J and M_{aα}[i] ⊐̈ M_{αb}[j] do
11:             j ← j + 1
12:         end while
13:                                          ▷ Verify that the corpus index
14:                                          ▷ for the first terminal symbol
15:         k ← i                            ▷ in pattern αb is the same
16:         while M_{αb}[i]_{,1} = M_{αb}[k]_{,1} do    ▷ for locations M_{αb}[i] and M_{αb}[k]
17:             ℓ ← j
18:             while ℓ < J and not M_{aα}[i] ⊏̈ M_{αb}[ℓ] do
19:                 if M_{aα}[i] =̈ M_{αb}[ℓ] then
20:                     Intersect M_{aα}[i] with M_{αb}[ℓ] and append result to M_{aαb}
21:                 end if
22:                 ℓ ← ℓ + 1                ▷ Proceed to next element in M_{αb}
23:             end while
24:             i ← i + 1                    ▷ Proceed to next element in M_{aα}
25:         end while
26:     end while
27:     return M_{aαb}
28: end function
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Result: Sorted list of corpus locations matching source language pattern $a\alpha b$: $M_{a\alpha b}$