
Divide-and-Conquer-Alignment(X, Y)

Let m be the number of symbols in X

Let n be the number of symbols in Y

If $m \leq 2$ or $n \leq 2$ then

 Compute optimal alignment using Alignment(X, Y)

Call Space-Efficient-Alignment($X, Y[1:n/2]$)

Call Backward-Space-Efficient-Alignment($X, Y[n/2 + 1:n]$)

Let q be the index minimizing $f(q, n/2) + g(q, n/2)$

Add $(q, n/2)$ to global list P

Divide-and-Conquer-Alignment($X[1:q], Y[1:n/2]$)

Divide-and-Conquer-Alignment($X[q + 1:n], Y[n/2 + 1:n]$)

Return P
