ACO - 30/10/2)   LCS   PESATA

X, Y SER. DI n, m EL. DI Z E
W: Z → N_+

C. B.

$\ell_{i,j,c} = |LCS_{i,j}|$ t.c. $w(LCS_{i,j}) \le c$

$\dot{\imath} = 0$ V $\ell_{i,j,c} = 0$
$j = 0$ V
$c = 0$

PASSO

$i, j, c > 0$ SE $w(x_i) \ge c$ ∧ $\ell_{i,j,c} = \ell_{i-1, j-1, c-w(x_i)} + 1$
                      $x_i = y_j$

                 SE $w(x_i) > c$ V $\ell_{i,j,c} = \max(\ell_{i-1, j, c},$
                      $x_i \ne y_j$ $\ell_{i, j-1, c})$

FOR $i = 1$ TO N
  FOR $j = 1$ TO m
    $D_{i,j,0} = 0$

FOR $j = 1$ TO m
  FOR $c = 1$ TO C
    $D_{0,j,c} = 0$

FOR $i = 1$ TO m
  FOR $c = 1$ TO C
    $D_{i,0,c} = 0$

FOR $i = 1$ TO N
  FOR $j = 1$ TO m
    FOR $c = 1$ TO C

      IF $x_i \ne y_j$ V $w(x_i) > c$
        $D_{i,j,c} = \max(D_{i-1,j,c},$
                            $D_{i,j-1,c})$
      ELSE $D_{i,j,c} = D_{i-1, j-1, c-w(x_i)} + 1$