Entrada: $(x_0, y_0), ..., (x_m, y_m)$
Salida: Coeficientes $\alpha_0, \alpha_1, ..., \alpha_m$ en la base $\{X^{(0)}, ..., X^{(n)}\}$.

1   $a_0 = y_0$;
2   $s = \alpha_j - \alpha_0$;
3   $f = x_j - x_0$;
4 **for** $j = 1$ **to** m **do**
5    $s = y_j - \alpha_0$; $f = x_j - x_0$;
6   **for** $k = 1$ **to** $j - 1$ **do**
7      $s = s - \alpha_k \cdot f$;
8      $f = (x_j - x_k) \cdot f$;
9   **return** $\alpha_j = s/f$;