

EXTRACT-FEATURES( $s, \delta_m, \theta_m$ )

$f \leftarrow \text{create Map}$

FOR  $p \leftarrow 1$  to  $|s| - 1$  DO

FOR  $\delta \leftarrow 2$  to  $\min(|s| - p + 1, \delta_m)$  DO

FOR  $\theta_\alpha \leftarrow 1$  to  $\min(\delta - 1, \theta_m)$  DO

FOR  $\theta_{\alpha'} \leftarrow 1$  to  $\min(\delta - \theta_\alpha, \theta_m)$  DO

$\alpha \leftarrow s(p : p + \theta_\alpha - 1)$  ;  $\alpha' \leftarrow s(p + \delta - \theta_{\alpha'} : p + \delta - 1)$

key  $\leftarrow$  MAKE-KEY( $\delta, \alpha, \alpha'$ )

IF  $f$  does not contain key THEN  $f[\text{key}] \leftarrow 0$

$f[\text{key}] \leftarrow f[\text{key}] + 1$

RETURN  $f$