



A DFT  $T_i$  that computes the seq2seq language  $g(w', p) = I_{L_{\mathbf{swap}_{(p,i)}}}(w')$  for  $i = 3$ .  $\sigma$  (resp.  $\sigma'$ ) refers to any symbol in  $\Sigma$  (resp.  $\Sigma_{\#}$ ).