



Figure 4: Second step of encryption.

The second step involves adding the transitions 0 and 1 to the states of automata that correspond to the in and out vertices of the transition. In the above example we define transition  $\rho(5a, 0) = 2b$ , which corresponds to the first transition of the encoded word, and  $\rho(12b, 1) = 9c$ , which corresponds to the second transition of the encoded word. Transitions added in this step are bolded.