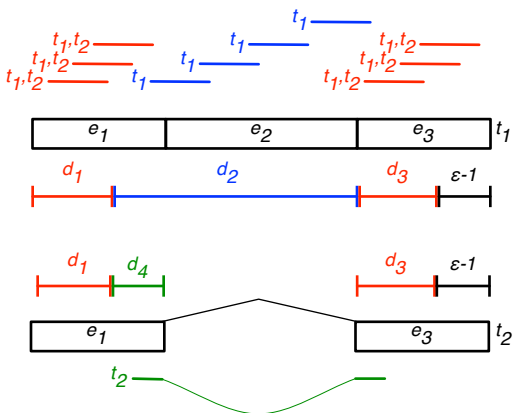


(a)



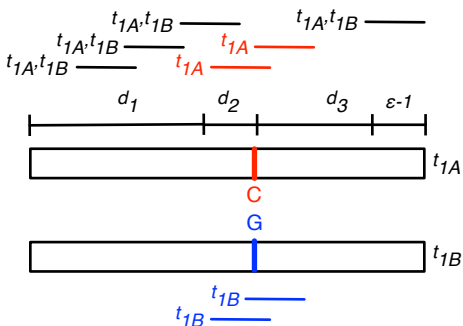
$$M = \begin{pmatrix} 1 & 1 \\ 1 & 0 \\ 0 & 1 \end{pmatrix} \quad \mathbf{k} = \begin{pmatrix} 6 \\ 4 \\ 1 \end{pmatrix}$$

$$\mathbf{s} = \begin{pmatrix} d_1 + d_3 \\ d_2 \\ d_4 \end{pmatrix} = \begin{pmatrix} e_1 + e_3 - 2(\epsilon - 1) \\ e_2 + \epsilon - 1 \\ \epsilon - 1 \end{pmatrix}$$

$$l_1 = s_1 + s_2 = e_1 + e_2 + e_3 - (\epsilon - 1)$$

$$l_2 = s_1 + s_3 = e_1 + e_3 - (\epsilon - 1)$$

(b)



$$M = \begin{pmatrix} 1 & 1 \\ 1 & 0 \\ 0 & 1 \end{pmatrix} \quad \mathbf{k} = \begin{pmatrix} 4 \\ 2 \\ 2 \end{pmatrix}$$