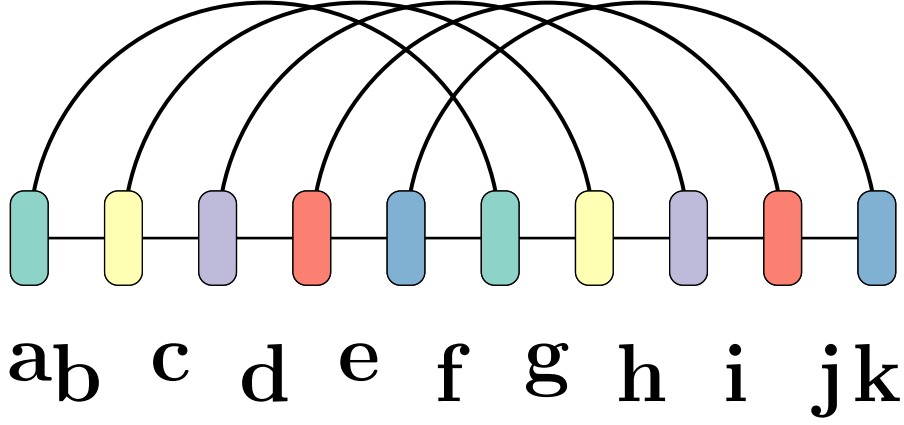


fatgraph name: K5



first and last anchors, already given: a, t

$$A = \min (B [])$$

$$B = \min_{a,c,g,j,l,q} \left(L[a,l|c,j] + G[c,g,l,q] + C[a,g,j,q] \right)$$

$$C[a,g,j,q] = \min_{h,r} \left(C_{\boxtimes}[g,h-1,q,r-1] + D[a,h,j,r] \right)$$

$$D[a,h,j,r] = \min_i (E[a,i,j,r])$$

$$E[a,i,j,r] = \min_t (F[i,j,r,t])$$

$$F[i,j,r,t] = \min_s \left(C_{\boxtimes}[i,j-1,s,t-1] \right)$$

$$G[c,g,l,q] = \min_{d,n} (I[d,g,n,q] + H[c,d,l,n])$$

$$H[c,d,l,n] = \min_m \left(C_{\boxtimes}[c,d-1,m,n-1] \right)$$

$$I[d,g,n,q] = \min_p (J[d,g,n,p])$$

$$J[d,g,n,p] = \min_e \left(K[e,p|g,n] \right)$$

$$K'[e,p|g,n] = \min \begin{cases} K'[e,p-1|g,n], & \text{if } p-1, \notin \{e,g,n\} \\ K[e+1,p-1|g,n] + \Delta G(e,p) & \text{if } \{e+1,p-1\} \cap \{g,n\} = \emptyset \end{cases}$$

$$\begin{aligned}
\textcolor{blue}{K}[e, p|g, n] &= \min \begin{cases} \textcolor{blue}{K}[e+1, p|g, n], & \text{if } e+1 \notin \{p, g, n\} \\ \textcolor{blue}{K}[e, p-1|g, n], & \text{if } p-1 \notin \{e, g, n\} \\ \textcolor{blue}{K}[e+1, p-1|g, n] + \Delta G(e, p) & \text{if } \{e+1, p-1\} \cap \{g, n\} = \emptyset \end{cases} \\
\textcolor{yellow}{L}'[a, l|c, j] &= \min \begin{cases} \textcolor{yellow}{L}'[a+1, l|c, j], & \text{if } a+1 \notin \{l, c, j\} \\ \textcolor{yellow}{L}[a+1, l-1|c, j] + \Delta G(a, l) & \text{if } \{a+1, l-1\} \cap \{c, j\} = \emptyset \end{cases} \\
\textcolor{yellow}{L}[a, l|c, j] &= \min \begin{cases} \textcolor{yellow}{L}[a, l-1|c, j], & \text{if } l-1 \notin \{a, c, j\} \\ \textcolor{yellow}{L}'[a+1, l|c, j], & \text{if } a+1 \notin \{l, c, j\} \\ \textcolor{yellow}{L}[a+1, l-1|c, j] + \Delta G(a, l) & \text{if } \{a+1, l-1\} \cap \{c, j\} = \emptyset \end{cases}
\end{aligned}$$