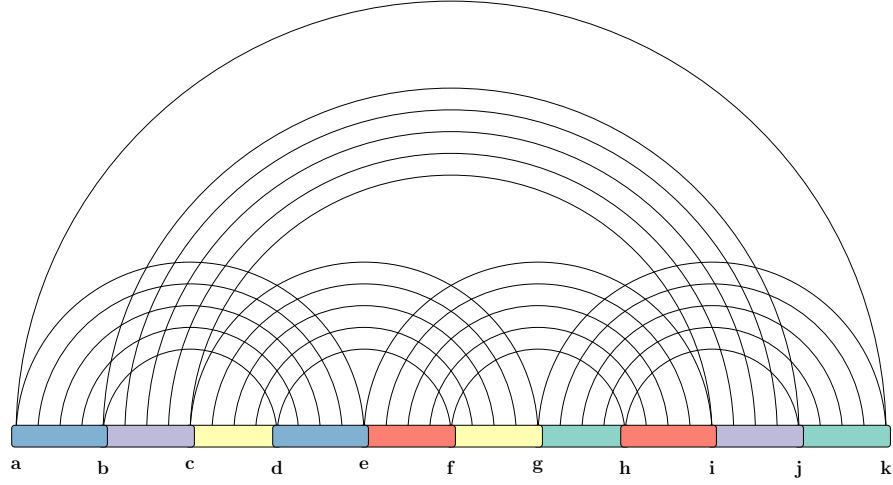


fatgraph name: C5



first and last anchors, already given:  $a, k$

$$A = \min_{g,h,j} \left( B[g, h, a, j] + C_{\boxtimes}[g, h, j, k] \right)$$

$$B[a, g, h, j] = \min_{e,f,i} \left( C[a, e|g, i, f, j] + C_{\boxtimes}[e, f, h, i] \right)$$

$$C'[a, e|g, i, f, j] = \min \begin{cases} C'[a, e-1|g, i, f, j], & \text{if } e-1 \notin \{a, g, i, f, j\} \\ C[a+1, e-1|g, i, f, j] + \Delta G(a, e) & \text{if } \{a+1, e-1\} \cap \{g, i, f, j\} = \emptyset \end{cases}$$

$$C[a, e|g, i, f, j] = \min \begin{cases} C[a+1, e|g, i, f, j], & \text{if } a+1 \notin \{e, g, i, f, j\} \\ C'[a, e-1|g, i, f, j], & \text{if } e-1 \notin \{a, g, i, f, j\} \\ C[a+1, e-1|g, i, f, j] + \Delta G(a, e) & \text{if } \{a+1, e-1\} \cap \{g, i, f, j\} = \emptyset, \\ D[1, i, f, 17, g, j] \end{cases}$$

$$D[b, d, f, g, i, j] = \min_c \left( C_{\boxtimes}[c, d, f, g] + C_{\boxtimes}[b, c, i, j] \right)$$