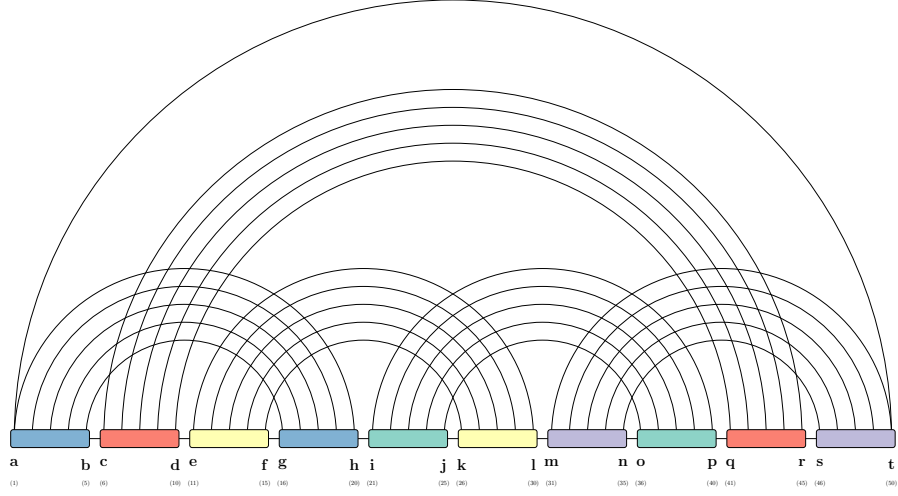


fatgraph name: C5



first and last anchors, already given: a, t

$$A[a, t] = \min_{m, n, r} (B[r, a, m, n] + M[r, t, m, n])$$

$$B[a, m, n, r] = \min_l (C[r, a, l, n])$$

$$C[a, l, n, r] = \min_{h, k, p} \left(\boxed{D}[a, h \mid r, p, l, k] + J[h, n, p, k, a] \right)$$

$$\boxed{D}'[a, h \mid r, p, l, k] = \min \begin{cases} \boxed{D}'[a, h-1 \mid r, p, l, k], & \text{if } h-1, \notin \{a, r, p, l, k\} \\ \boxed{D}[a+1, h-1 \mid r, p, l, k] + \Delta G(a, h) & \text{if } \{a+1, h-1\} \cap \{r, p, l, k\} = \emptyset \end{cases}$$

$$\boxed{D}[a, h \mid r, p, l, k] = \min \begin{cases} \boxed{D}[a+1, h \mid r, p, l, k], & \text{if } a+1 \notin \{h, r, p, l, k\} \\ \boxed{D}'[a, h-1 \mid r, p, l, k], & \text{if } h-1, \notin \{a, r, p, l, k\} \\ \boxed{D}[a+1, h-1 \mid r, p, l, k] + \Delta G(a, h) & \text{if } \{a+1, h-1\} \cap \{r, p, l, k\} = \emptyset, \\ E[l, r, p, k, h, a] \end{cases}$$

$$E[b, g, k, l, p, r] = \min_e (F[r, p, b, e] + I[l, e, k, g, b])$$

$$F[b, e, p, r] = \min_c (G[r, p, c, e])$$

$$G[c, e, p, r] = \min_q (H[r, q, c, e])$$

$$H[c, e, q, r] = \min_d \left(\boxed{C_{\boxtimes}}[c, d, q, r] \right)$$

$$I[b, e, g, k, l] = \min_f \left(\boxed{C_{\boxtimes}}[e, f, k, l] \right)$$

$$J\left[a,h,k,n,p\right] =\min _i\left(K\left[n,p,k,i\right] \right)$$

$$K\left[i,k,n,p\right] =\min _o\left(L\left[p,k,o,i\right] \right)$$

$$L\left[i,k,o,p\right] =\min _j\left(C_{\boxtimes}\left[i,j,o,p\right] \right)$$

$$M\left[m,n,r,t\right] =\min _s\left(C_{\boxtimes}\left[m,n,s,t\right] \right)$$