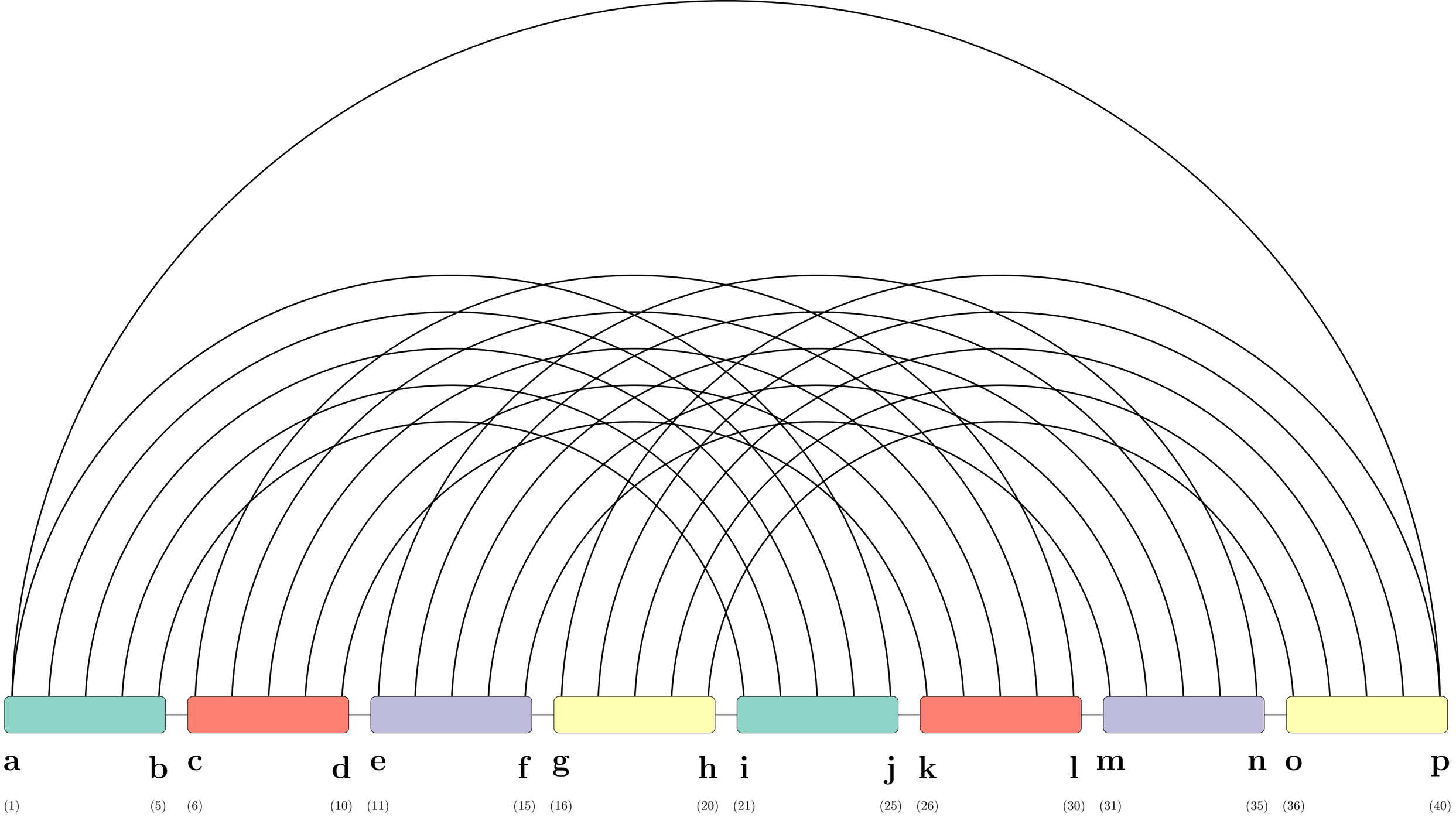
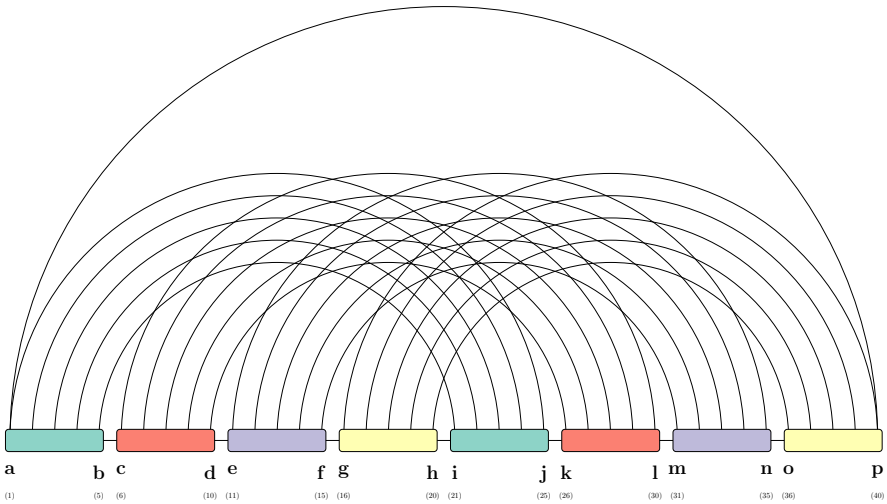

a
b
c
d
e
f
g
h
i
j
k
l
m
n
o
p
(1)
(5)
(6)
(10)
(11)
(15)
(16)
(20)
(21)
(25)
(26)
(30)
(31)
(35)
(36)
(40)

fatgraph name: K4



first and last anchors, already given: a, p

$$A'[p, g \mid a, f] = \min \begin{cases} A'[p, g-1 \mid a, f], & \text{if } g-1, \notin \{p, a, f\} \\ A[p+1, g-1 \mid a, f] + \Delta G(p, g) & \text{if } \{p+1, g-1\} \cap \{a, f\} = \emptyset \end{cases}$$

$$A[p, g \mid a, f] = \min \begin{cases} A[p+1, g \mid a, f], & \text{if } p+1 \notin \{g, a, f\} \\ A'[p, g-1 \mid a, f], & \text{if } g-1, \notin \{p, a, f\} \\ A[p+1, g-1 \mid a, f] + \Delta G(p, g) & \text{if } \{p+1, g-1\} \cap \{a, f\} = \emptyset, \\ B[f, g, a, p] \end{cases}$$

$$B[a, f, h, o] = \min_{n} (C[f, h, a, n])$$

$$C[a, f, h, n] = \min_{e,m} \left(D[m, h, a, e] + C_{\boxtimes}[e, f, m, n] \right)$$

$$D[a, e, h, m] = \min_{c,j} (E[c, m, j, e] + H[c, j, h, a])$$

$$E[c, e, j, m] = \min_{l} (F[c, j, l, e])$$

$$F[c, e, j, l] = \min_{d} (G[c, j, l, d])$$

$$G[c, d, j, l] = \min_{k} \left(C_{\boxtimes}[c, d, k, l] \right)$$

$$H[a, c, h, j] = \min_{i} (I[c, j, i, a])$$

$$I[a, c, i, j] = \min_{b} \left(C_{\boxtimes}[a, b, i, j] \right)$$

H1 (16-20-36-40) (diag)

40 17 **16**
15 1

40 39 17
15 1

39 17 18
15 1

38 39 18
15 1

38 19 18
15 1

38 19 37
15 1

19 **20** 37
15 1

20 36 37
15 1

1 15 20 35 36

1 11 15 20 31 35

H2 (11-15-31-35) (clique)

12 **35 11**
15 31

34 12 **35**
15 31

34 12 13
15 31

33 13 34
15 31

33 13 14
15 31

33 14 32
15 31

1 11 20 25 31 6

1 20 21 25 6

1 21 25 5 6

H0 (1-5-21-25) (clique)

2 **25 1**
5 21

24 2 **25**
5 21

3 24 2
5 21

3 23 24
5 21

3 23 4
5 21

23 4 22
5 21

11 25 30 31 6

10 11 25 30 6

10 25 26 30 6

H3 (6-10-26-30) (clique)

6 30 7
26 10

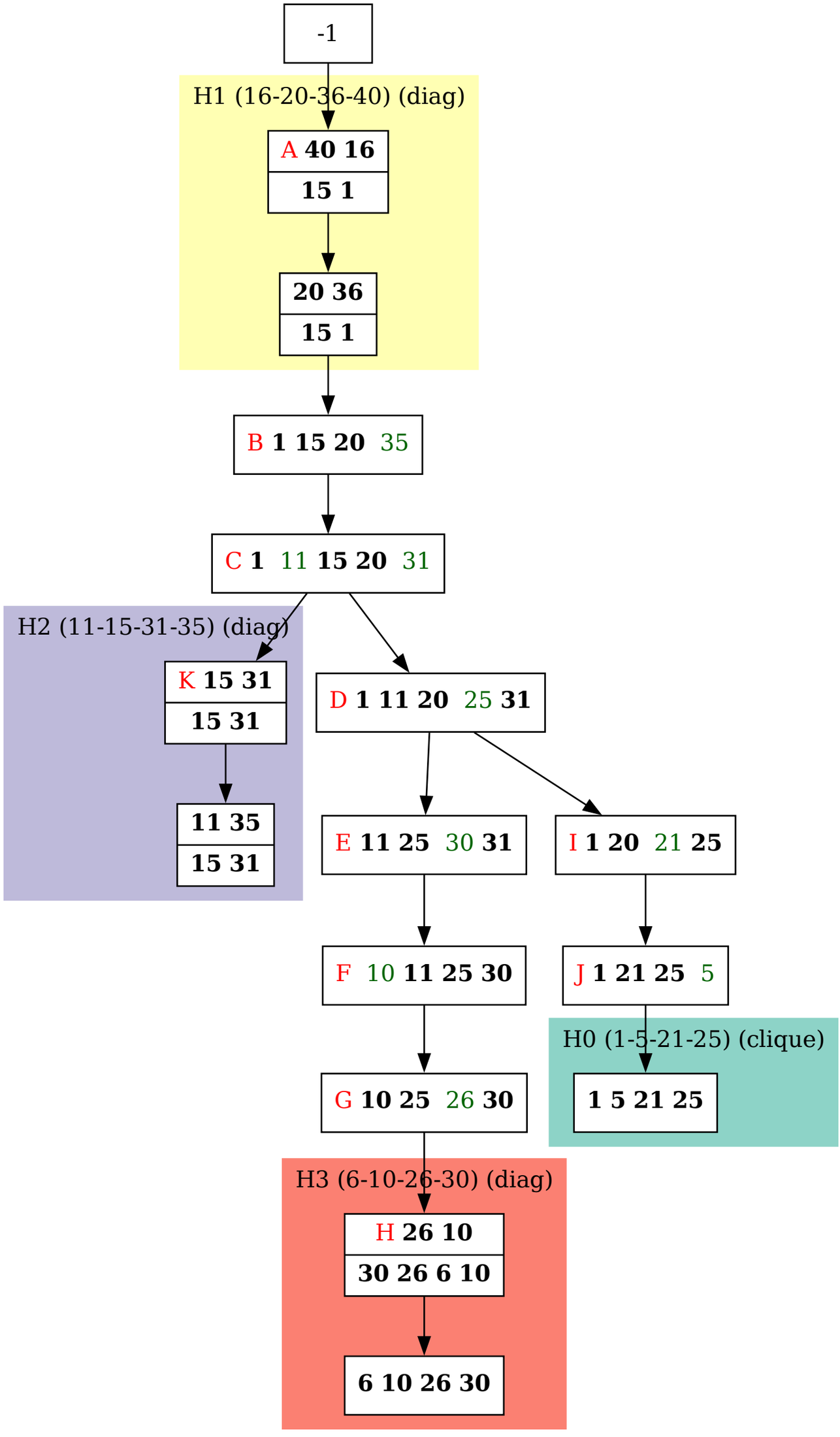
29 **30** 7
26 10

8 7 29
26 10

29 8 28
26 10

9 8 28
26 10

27 9 28
26 10


-1
H1 (16-20-36-40) (diag)
A 40 16
15 1
20 36
15 1
B 1 15 20 35
C 1 11 15 20 31
H2 (11-15-31-35) (diag)
K 15 31
15 31
11 35
15 31
D 1 11 20 25 31
E 11 25 30 31
I 1 20 21 25
F 10 11 25 30
J 1 21 25 5
H0 (1-5-21-25) (clique)
1 5 21 25
G 10 25 26 30
H3 (6-10-26-30) (diag)
H 26 10
30 26 6 10
6 10 26 30