



including current node

$$k=2 \quad i-j \leq k$$

0 1 2 3 4 5 6

a

b b b b b

$$3-1=2$$

~~100 000 ✓
25 000 ✓
50 000 ✓
25 000 ✓
20 000 ✓
25 000~~

~~Block chain Notes~~

~~exclusion of value !!!~~

back force

0 1 2 3 4 5 6 7 8 9

n=10

4 2 1 ⇒

2² 2¹ 2⁰

2 1 4 ⇒ 141

x x x
x x x
x x x

0 - - -
1 - - x
2 - x -
3 - x x
4 x - -
5 x - x
6 x x x
7 x x x

empty group

$$2^2 \cdot 2$$

$$1^2 \cdot 1$$

$$4^2 \cdot 4$$

one line 1 on the minimum

$$2^2 \cdot 2 + 2^2 \cdot 1 + 2^2 \cdot 4 =$$

$$1^2 \cdot 2 + 1^2 \cdot 1 + 1^2 \cdot 4$$

$$4^2 \cdot 2 + 4^2 \cdot 1 + 4^2 \cdot 4$$

sum → order does not matter
prod → order does not matter

1 2 3

3 7 300
min 2
2
1
1
1
1
1

④

$$4^2 \cdot 7$$

one line 1 on the minimum
all other time in the maximum

$$\left(\frac{3 \cdot 2}{6} \right) + \left(\frac{5 \cdot 3}{15} \right) = 21$$

~~Möbius~~

~~- Möbius~~

~~- Möbius~~

~~- Substitution~~

$$(a \cdot b) + (b \cdot c)$$

$$2, 1 \quad 2^2 \cdot 1$$

$$2, 4 \quad 4^2 \cdot 2$$

$$1, 4 \quad 4^2 \cdot 1$$

$$2, 1, 4 \quad 4^2 \cdot 1$$

$$2^4 = 2 \cdot 2 \cdot 2 \cdot 2 = 16 - 1 = 15$$

	0 2^3_8 1	1 2^2_4 2	2 2^1_2 3	3 2^0_1 4
0	-	-	-	-
1	-	-	-	x
2	-	-	x	-
3	-	-	x	x
4	-	x	-	-
5	-	x	-	x
6	-	x	x	-
7	-	x	x	x
8	x	-	-	-
9	x	-	-	x
10	x	-	x	-
11	x	-	x	x
12	x	x	-	-
13	x	x	-	x
14	x	x	x	-
15	x	x	x	x

max				
min				
max	I	II	III	IIII
min	IIII	IIII	II	IIII
neither		III	III	
	9	9	9	9

$$\begin{aligned}
 4^2 \cdot 4 &= 64 \\
 4^2 \cdot 3 &= 48 + \\
 4^2 \cdot 2 &= 32 + \\
 4^2 \cdot 2 &= 32 + \\
 4^2 \cdot 1 &= 16 + \\
 4^2 \cdot 1 &= 16 + \\
 4^2 \cdot 1 &= 16 + \\
 4^2 \cdot 1 &= 16 +
 \end{aligned}$$

$$\frac{8 \cdot 4^2}{128}$$

$$\begin{aligned}
 3^2 \cdot 3 \\
 3^2 \cdot 2 \\
 3^2 \cdot 1 \\
 3^2 \cdot 1
 \end{aligned}$$

$$\begin{aligned}
 2^2 \cdot 2 \\
 2^2 \cdot 1
 \end{aligned}$$

$$1^2 \cdot 1 = 1$$

$$\begin{aligned}
 2^2 \cdot (2+1) \\
 4 \cdot 3 &= 12
 \end{aligned}$$

$$\underline{\underline{1}}$$

$$\max^2 \cdot \min + (a \cdot b) + (a \cdot c)$$

$$a \cdot (b+c)$$

$$(a \cdot b) + (a \cdot c) + (a \cdot d)$$

$$a \cdot (b+c+c)$$

$$16 \cdot (4+3+2+2+1+1+1+1)$$

$$4^2 \cdot (4+3+2+2+1+1+1+1)$$

$$4 \cdot 3 \cdot 2 \cdot 2 \cdot 48$$

$$\begin{aligned}
 3^2 \cdot (3+2+1+1) \\
 3 \cdot 7 &= 63
 \end{aligned}$$

$$\begin{array}{cccc}
 1 & 1 & 2 & 4 \\
 4 & 4 & 2 & 1
 \end{array}$$

$$5^2 \cdot (5+4+3+3+2+2+2+2+1+1+1+1+1+1+1)$$

$$25 + 31$$

$$\underline{\underline{775}}$$

$$240 + 63 + 12 + 1$$

$$8$$

$$0$$

$$\underline{\underline{316}}$$

0	1	2	3	4
a	b	c	d	e
1	2	3	4	5

~~$$d^2(d+c+2b)$$~~

$$e^2(d+c+2b+4a) +$$

$$d^2(d+c+2b+4a) +$$

$$c^2(c+b+2a) +$$

$$b^2(b+a) +$$

$$a^2(a)$$

$$9, 3, 7 \Rightarrow 72297$$

$$4187$$

$$3, 5 \Rightarrow 7227$$

$$5, 3 \Rightarrow$$

↓ +a+c
↓
↓ b

5	3	5 ² ·5	125
		3 ² ·3	9
		5 ² ·3	75
		3 ² ·3	
		5 ² ·5	
		5 ² ·3	
		5 ² ·3	
		3 ² ·3	

5	3	5 ² ·5
		3 ² ·3
		5 ² ·3
3	5	3 ² ·3
		5 ² ·5
		5 ² ·3

$$b + 2a$$

$$2b + 4a$$

$$2(b + 2a)$$

$$2b + 4a$$

3	5	5 ² ·5	+	125
x	-	3 ² ·3	+	27
x	x	5 ² ·3	+	75

$$a^3 + 5^2(8)$$

$$729$$