Qus

| 0 | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 10 | 1 | 3 | 9 | 10 | 2 |

$x \Rightarrow 10$

↑
¦
¦

Not found

found = false ↗ T
$\Rightarrow$ 0  4

| 0 | 4 |

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Qus  Min cut tree

$k \Rightarrow 2$

| 1 | 2 | 1 | 2 |
|---|---|---|---|

$t_1 + t_2 + \ldots \leq k$

$x$



$x = 1$

$1 + 1 \Rightarrow 2 \leq k$

$1 + 2 + 1 + 2 \Rightarrow 6 \leq k$

$n$

$0 \longrightarrow$  $t_1 + t_2 + t_3 + \ldots \leq k$

$1 \longrightarrow$

$2 \longrightarrow$

$n = n$

$$k \Rightarrow 5$$

|   | 9 | 3 | 2 | 5 | 4 | 7 |   |
|---|---|---|---|---|---|---|---|
| 0 | 9 | 3 | 2 | 5 | 4 | 7 | $\Rightarrow 30$ |
| 1 | 8 | 2 | 1 | 4 | 3 | 6 | $\Rightarrow 24$ |
| 2 | 7 | 1 | 0 | 3 | 2 | 5 | $\Rightarrow 18$ |
| 3 | 6 | 0 | 0 | 2 | 1 | 4 | $\Rightarrow 13$ |
| 4 | 5 | 0 | 0 | 1 | 0 | 3 | $\Rightarrow 9$ |
| 5 | 4 | 0 | 0 | 0 | 0 | 2 | $\Rightarrow 6$ |
| 6 | 3 | 0 | 0 | 0 | 0 | 1 | $\Rightarrow 4$ |

$n \Rightarrow$

y

0

p s int  length cutc

n  100000

1000000  ⟹ $2^{10+10}$

$10^3 ≈ 2^{10}$    $2^{20}$

$\log_2(2^{20})$    $20 \log_2 2$

⟹ 20

$l = 0$

$h = 10^5$

m ⟹ $l + h / 2$

0 ————————— m ————————— 100000

l        h

$k \Rightarrow 5$

9   3   2   5   4   7

0   1   2   3   4   5   **6**

$l$                     $n$                     $h$

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Qus

| 1 | 7 | 2 | 4 | 9 | 5 | 6 | 3 |
|---|---|---|---|---|---|---|---|

1   2   3   4   5   6   7   9

```
for(i=0; i < a.length; i++) {
    for(j=0, i < a.length; j++) {
        if(arr[i] == arr[j] && i != j)
            syso(yes);
    }
}
```
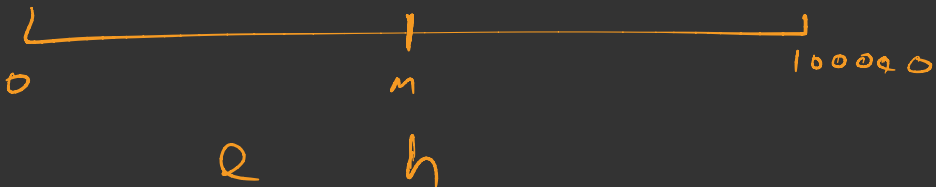
| 2 3 5 9 10 |
|---|

A

i

| 4 7 10 12 |
|---|

B

j

S

n

6

3 4
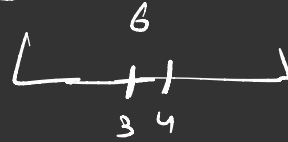
Odd ⟹ middle ⟹

even ⟹ avg of 2 middle ⟩ median

| 2 3 4 |
|---|

k

$(n + m) \log (n + m)$