

pivot = 8

3, 8, 12, 25, 6, 23, 7, 1, 15, 9, 9, 17  
left right

3, 4, 12, 25, 6, 23, 7, 1, 15, 8, 9, 17

3, 4, 1, 25, 6, 23, 7, 12, 15, 8, 9, 17

3, 4, 1, 7, 6 | 23, 25, 12, 15, 8, 9, 17  
 $\leq 8$   $8 \leq$

└ left  $\geq$  right  $\rightarrow$  break  $\rightarrow$  exit. left - right  $\in \{0, 1\}$

• left - right = 0  $\alpha \in \mathbb{Z}$ .

つまり pivot を 1 通り選ぶ。  $[0, \dots, \text{pivot}-1] \in [\text{pivot}, \dots, n-1]$

1 = 1017  $\rightarrow$  1-1017

• left - right = 1  $\alpha \in \mathbb{Z}$ .

left  $\in$  right  $\alpha$  境界  $\rightarrow$  1017  $\rightarrow$  1-1017