

Ex 3

Sunday, January 30, 2022 10:50 AM

③ 3 processors, data partition

Data: abc fgv hbc dsb

Solution

3 processors \rightarrow 3 data partitions

abcf

gvhb

cdsb

$T: e(a,b)$
 $\times 4$

Task T receives 4 letters

Task T does
4 basic
operations

Partitioning

Communication

Union

Mapping

$T: e(a,b)$
 $\times 4$

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$T_2: 11 \text{ sums}$

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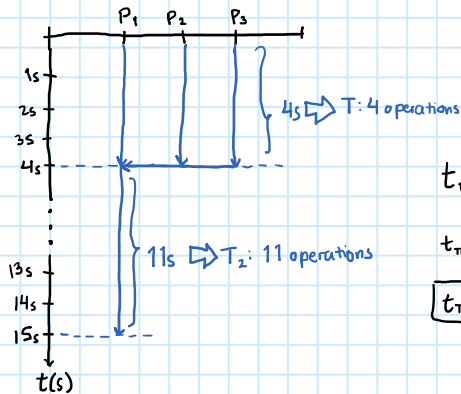
$T: e(a,b)$
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Time diagram: Assuming that 1 operation ($=, +, -, *, /$) takes 1s:



$$t_{\text{TOTAL}} = \max\{P_1, P_2, P_3\}$$

$$t_{\text{TOTAL}} = \max\{15s, 4s, 4s\}$$

$$t_{\text{TOTAL}} = 15s$$