

Ex 2

Sunday, January 30, 2022 9:41 AM

② 6 processors, data partition

Solution

Data: abc fgv hbc dsb

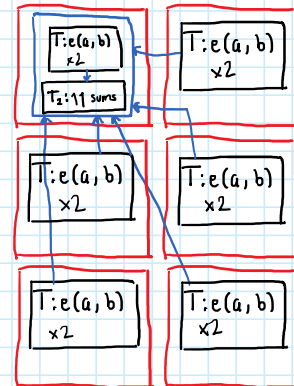
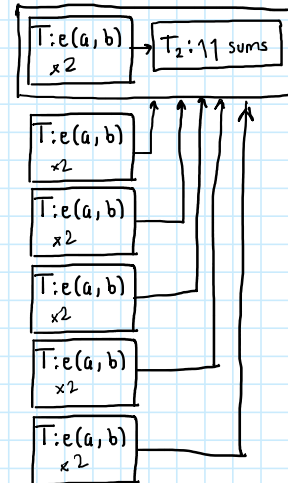
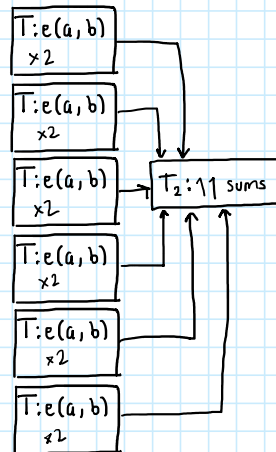
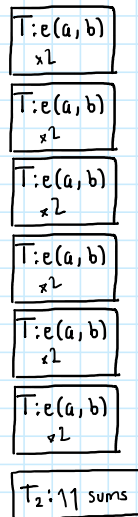
1 2 3 4 5 6 Parts → 6 processors

Partitioning

Communication

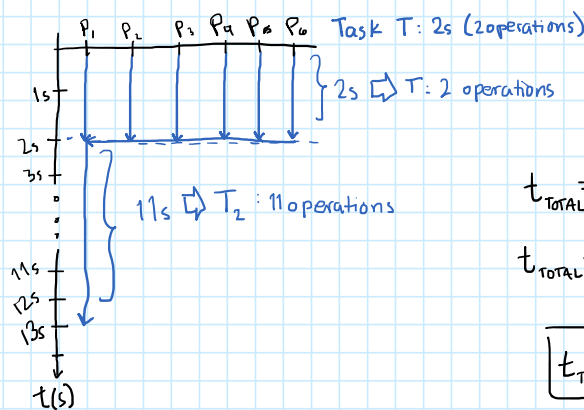
Union

Mapping



Task T has 1 basic instruction that is executed on 1 data piece (2 letters) = 2 operations

Time diagram: Assuming that 1 operation (=, +, -, *, /) takes 1s:



$$t_{\text{TOTAL}} = \max\{P_1, P_2, \dots, P_6\}$$

$$t_{\text{TOTAL}} = \max\{13s, 2s, 2s, 2s, 2s, 2s\}$$

$$t_{\text{TOTAL}} = 13s$$