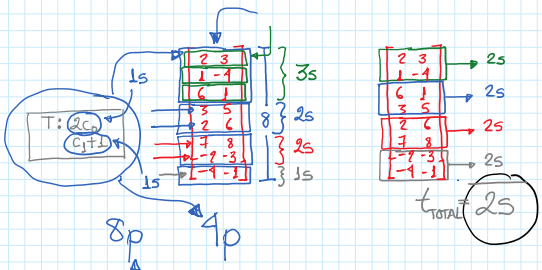
Pizarrón

jueves, 20 de enero de 2022 06:59 a. m.

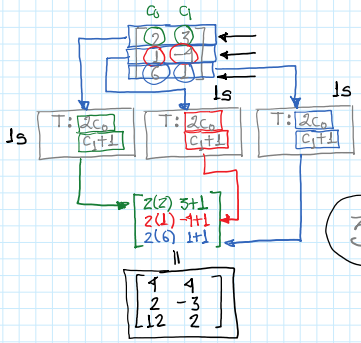
PARTICIONAMIENTO

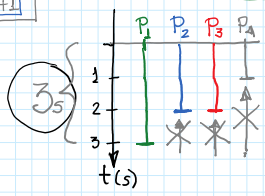
DATOS: $A = \begin{bmatrix} 2 & 3 \\ 1 & -1 \\ 6 & 1 \end{bmatrix}$ (C_0, C_1)

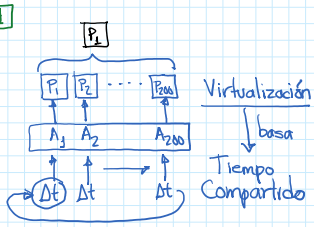
TAREA: $B = \begin{bmatrix} 2(2) & 3+1 \\ 2(1) & -1+1 \\ 2(6) & 1+1 \end{bmatrix}$



PARALELISMO: Datos.

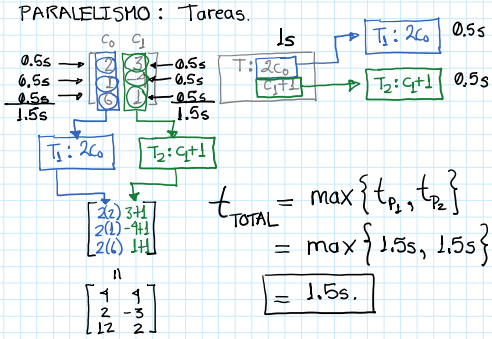






$$t_{TOTAL} = \max\{t_{P_1}, t_{P_2}, t_{P_3}\}$$
$$= \max\{1s, 1s, 1s\}$$
$$= 1s$$

PARALELISMO: Tareas.



$$t_{TOTAL} = \max\{t_{P_1}, t_{P_2}\}$$
$$= \max\{1.5s, 1.5s\}$$
$$= 1.5s.$$

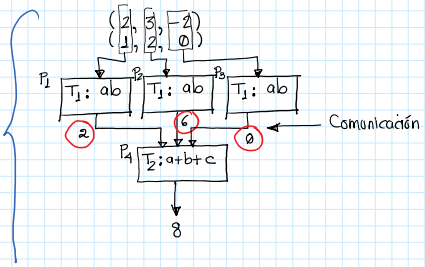
COMUNICACION:

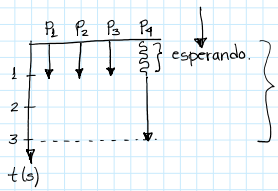
DATOS: $\vec{x}_1 = (2, 3, -2)$, $\vec{x}_2 = (1, 2, 0)$

TAREA: $\vec{x}_1 \cdot \vec{x}_2 = 2(1) + 3(2) + (-2)(0)$

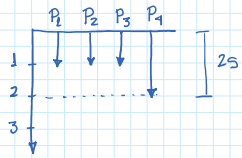
T: mult. elemento a elemento
suma de las mult.

T1: ab (1s) T2: a+b+c (2s)





$t_T = \max(t_{P_1}, t_{P_2}, t_{P_3}, t_{P_4})$
$= \max(1s, 1s, 1s, 3s)$
$= 3s$



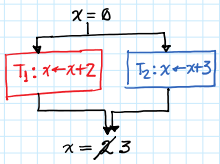
SINCRONIZACIÓN:

DATOS: $x = 0$

TAREA: Agregar 2 a x
Agregar 3 a x

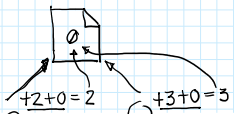
T: $x \leftarrow x+2$
$x \leftarrow x+3$

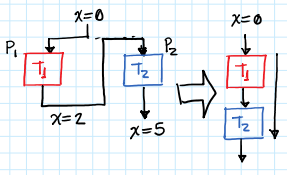
T1: $x \leftarrow x+2$ T2: $x \leftarrow x+3$

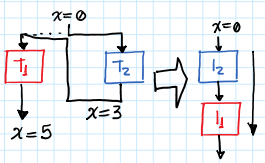


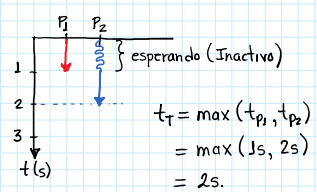
$x = \not{3}$
$x = \not{2}$
$x = 4$

Condición de carrera.

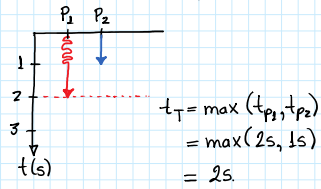




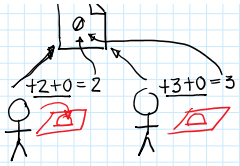


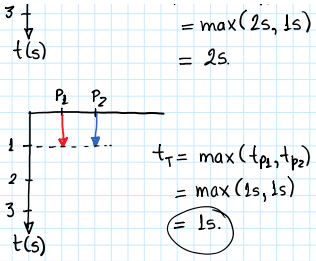


$t_T = \max(t_{P_1}, t_{P_2})$
$= \max(1s, 2s)$
$= 2s.$



$t_T = \max(t_{P_1}, t_{P_2})$
$= \max(2s, 1s)$
$= 2s$





BALANCE de CARGA:

DATOS: $\vec{x}_1 = (2,1,3,1)$
$\vec{x}_2 = (5,6,7,1)$

TAREA: $\vec{x}_1 + \vec{x}_2 = (2+5, 1+6, 3+7, 1+1)$

T: a+b = +