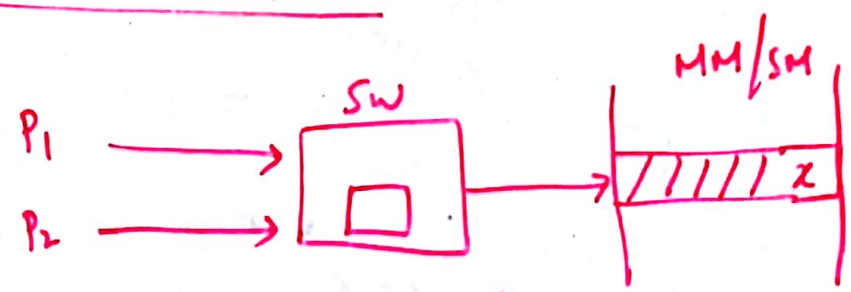
Fetch & Add (x, e)

(fig 7:11 ; page: 346)

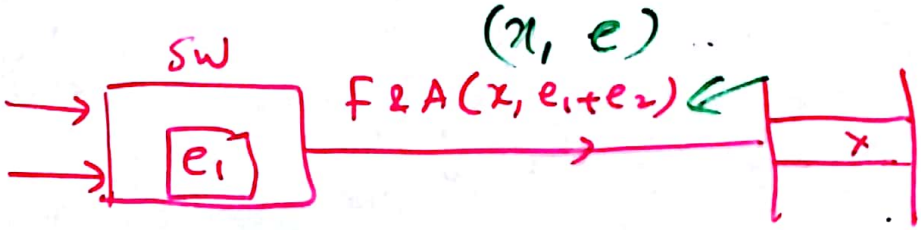
① 

P_1: F&A(x, e_1)

P_2: F&A(x, e_2)

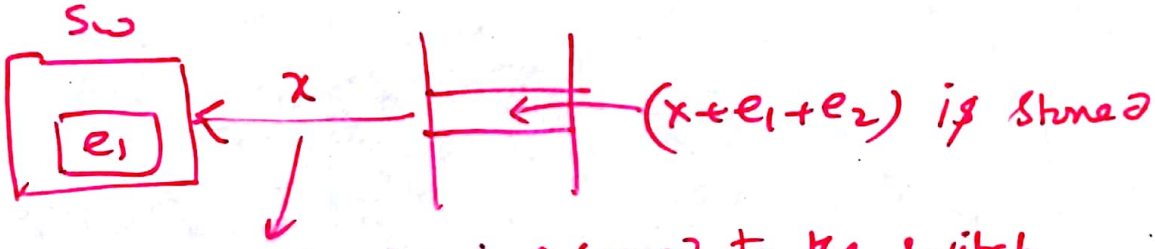
Result: $x \rightarrow P_1$

$x + e_1 \rightarrow P_2$

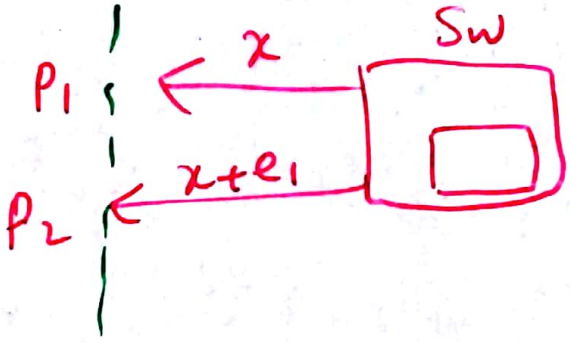
② 

$e = e_1 + e_2$

Switch forms the sum $(e_1 + e_2)$,
stores e_1 & forwards the combined req to MM.

③ 

original value is returned to the switch

④ 

Suppose
$P_2 \rightarrow P_1$
$Ans_2 \leftarrow x$
$Ans_1 \leftarrow x + e_2$

Regardless of the executing order, we have $(x + e_1 + e_2)$ is stored at that loc. in MM.