

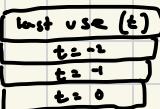
Homework 4

Matt Krueger

$i=0$

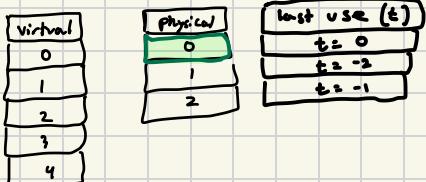
Accessed	Hit/Miss	Swapped Page
0	Hit	x
2	Hit	x
3	Miss	1
1	Miss	0
4	Miss	2
5	Hit	x
6	Miss	3
7	Miss	4

INIT

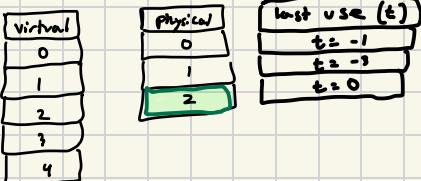


Least Recently Used (LRU)

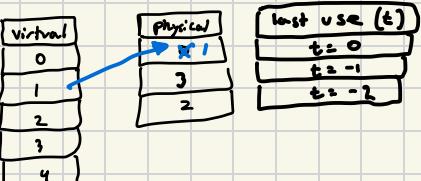
$i=0$: access 0 Hit



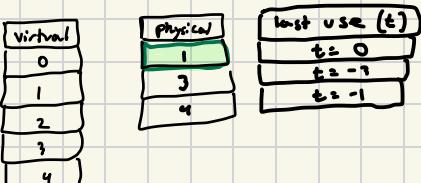
$i=1$: access 2 Miss



$i=2$: access 1 Miss



$i=3$: access 1 Hit



!! Assumptions & process notice !!

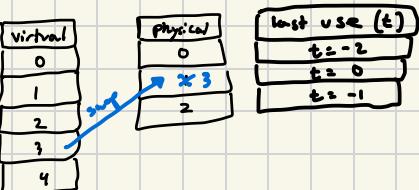
Starting Condition: "inserted in the order: 0,1,2" as 2 being most recently accessed.

This also assumes optimal LRU and not an LRU approximation.

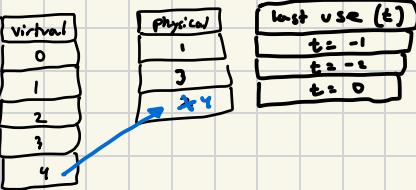
For this reason, I am tracking time since last access assuming each simulation is 1 time unit. LRU is implemented differently as stated in the book.
But, for the purposes of this assignment, these assumptions should suffice.

Additionally my drawings are conceptual...

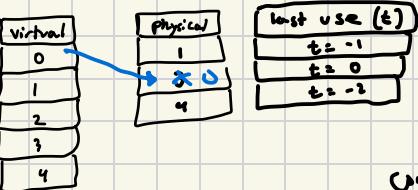
$i=2$: access 3 Miss



$i=4$: access 4 Miss



$i=6$: access 0 Miss



Continues ...

$i=7$: access

Miss

virtual
0
1
2
3
4

Physical
1
0
x 3

last use (t)
t = -2
t = -1
t = 0

Final Main Memory state

virtual
0
1
2
3
4

Physical
1
0
3