

Extra Credit 3

First in First Out (FIFO)

2	3	2	1	5	2	4	5	3	2	5	2
2	2	2	2	5	5	5	5	3	3	3	3
-	3	3	3	3	2	2	2	2	2	5	5
-	-	-	1	1	1	4	4	4	4	4	2

replace the page that has most stored number

← stay

← add

← replace

Last Recently Used (LRU)

2	3	2	1	5	2	4	5	3	2	5	2
2	2	2	2	2	2	2	2	3	3	3	3
-	3	3	3	5	5	5	5	5	5	5	5
-	-	-	1	1	1	4	4	4	2	2	2

replace 3 because

- 1 was 1st used
- 2 was 2nd used
- 3 was 3rd used

The number at 3rd place is the least recently used

number of LRU to replace = slots down the "current" page

option to start from 0

← stay

← add

← replace

3	2	1	5	6	1	2	2	5	7	3	2	1
3	3	3	3	7	7	7	7	7	7	7	7	7
-	2	2	2	2	2	2	2	2	2	2	2	2
-	-	1	1	1	1	1	1	1	1	3	3	3
-	-	-	5	5	5	5	5	5	5	5	5	1

Optimal Page Replacement

2	3	2	1	5	2	4	5	3	2	5	2
2	2	2	2	2	2	4	4	4	2	2	2
-	3	3	3	3	3	3	3	3	3	3	3
-	-	-	1	5	5	5	5	5	5	5	5

look in the future to replace "current" page

look for the furthest number for replacement

There is no 1 in the future

← stay

← add

← replace

Clock Policy

2	3	2	1	5	2	4	5	3	2
2	2	2	2	5	5	5	5	3	3
3	3	3	3	3	2	2	2	2	2
	3	3	1	1	1	4	4	1	1

← pointer