Lecture 26
RRu

classmate
Date 03/04/18
Page

In LRU, each frame has a counter associated with it. Whenever a page is replaced the counter is reset. The counter value is increased every clock pulse (ageing). Also called ageing register.

The page with max counter value is replaced next time. (means page with max age).

Alternatively,
We maintain a stack and the oldest page is at the bottom. ~~top. to replace the page~~ A page referenced is moved to the top of the stack. Doubly linked list is used to implement it.

This whole configuration is not feasible. So instead of maintaining so many counters, we maintain a reference bit.
All reference bits are 0 by default & the oldest page has bit 1.
∴ Page with bit 1 is replaced.

← left shift

1	00000000
2	00000001
3	00000011
4	00000111

↑ older page has least value

Ref	
1	7
0 1	1
0	0
0	1
0	2

Reference bit is set to 1 each time they are referenced.

A page with reference bit 1 is given a second chance by making its ref. bit 0.

Victime page is the bit 0.

LFU (least frequently used)

The page with smallest counter value is replaced.

MFU (most frequently used)

The page with smallest counter value is replaced. (?)