# 112-1 OS Lab

Group 2

#### ssd\_do\_write

offset align 512



size ! = 512

size = 512

Case 1

offset not align 512



offset + size ! = 512

Case 2

offset + size = 512

Case 3

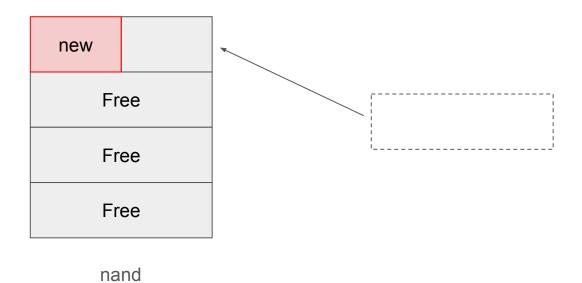
If LBA is clean.

Free Free Free

nand



If LBA is clean.



If LBA already has data.

LBA 0

LBA 1

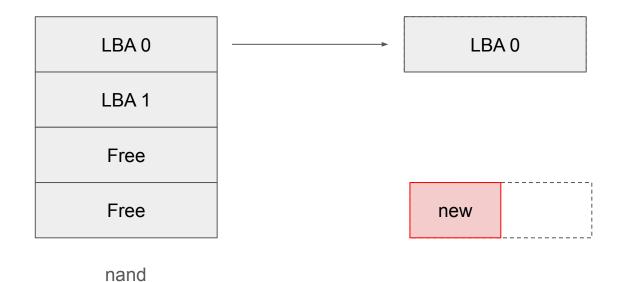
Free

Free

nand

new

If LBA already has data.



If LBA already has data.

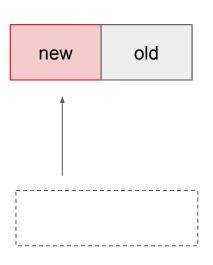
LBA 0

LBA 1

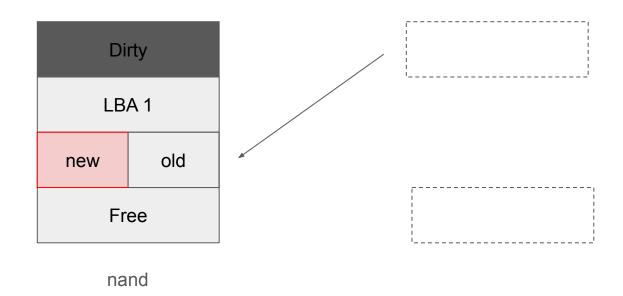
Free

Free

nand



If LBA already has data.



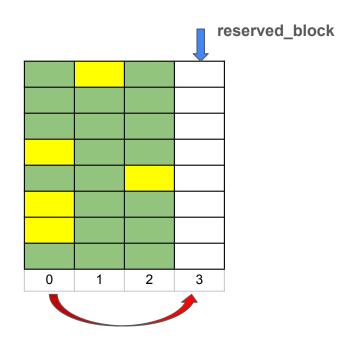
## If size > 512

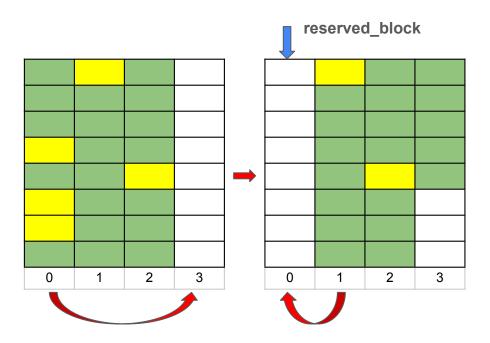
|--|

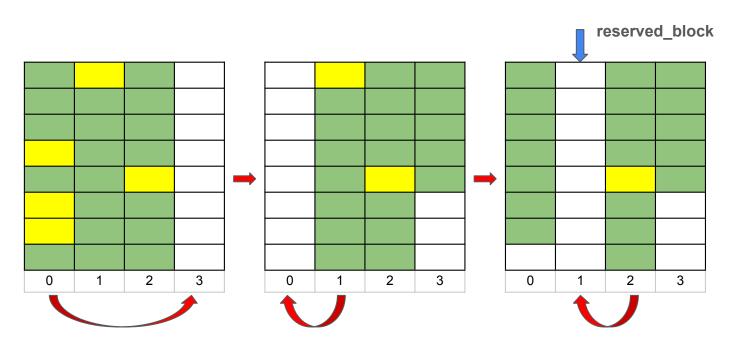
設定 u = 37.5%

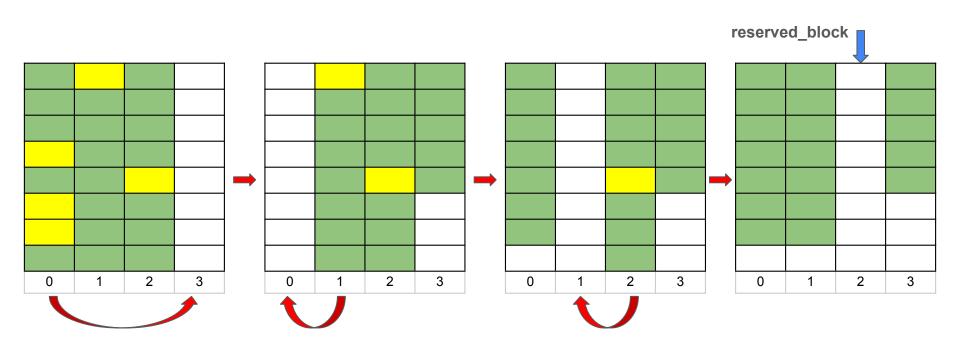
先假設每一個 block 有 8 個 pages 則有 3 個 pages invalid 時, 就會做 GC。

u = 3 / 8 = 0.375 u = invalid page 數量 / 總 pages 數量









#### GC base u = 20%

假設有 20 個 pages 則有 4 個 pages invalid 時, 就會做 GC。

