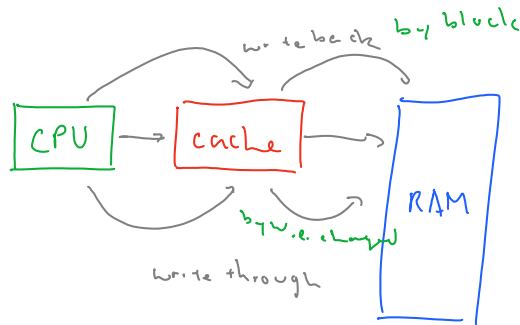


27 Associative Caches

Friday, November 6, 2015 10:02 AM



Put it off, maybe its never going to happen

Write misses

I don't really care for having this stuff in the cache later, its not required that I replace something in the cache

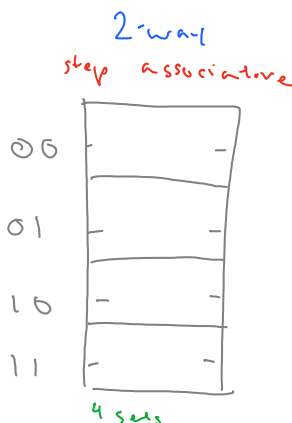
- Write allocate
 - Bring in the missing block from RAM
 - Write
 - Really only matches with write back
- No Write allocate
 - Ignore the fact that I'm missing the block
 - Write immediately to RAM, leave cache as is
 - Really only matches with write through

Associative Caches

Problem is thinking about ways to reduce the number of colisions in cache

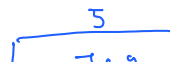
Only talking about direct mapped caches

In a direct mapped cache



Can make another policy decision
More flexible block placemenet

More complicated H/W for parrallel searches



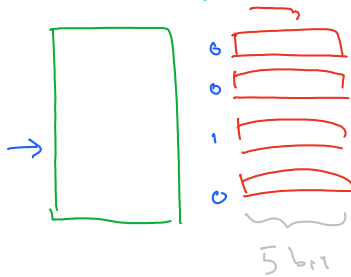
ing | index |

5 | index |

1 | index |

The one that was accessed least recently

5-bit window of history.
past 5 accesses, everyone appears to be
the same age



- FIFO

random policy is also
not that bad