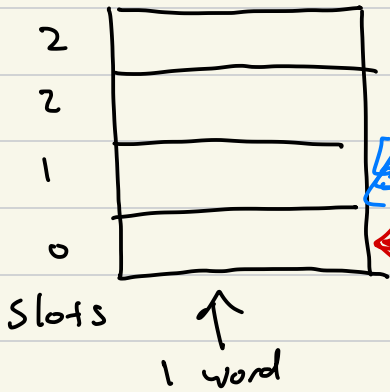


CS 315-01 Project 04 Midterm

Midterm on Thurs.

Cache

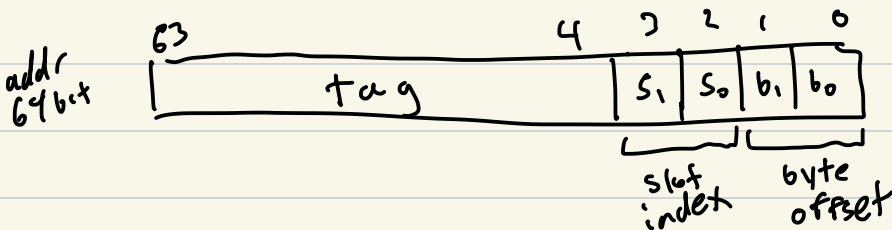
Direct Mapped Cache



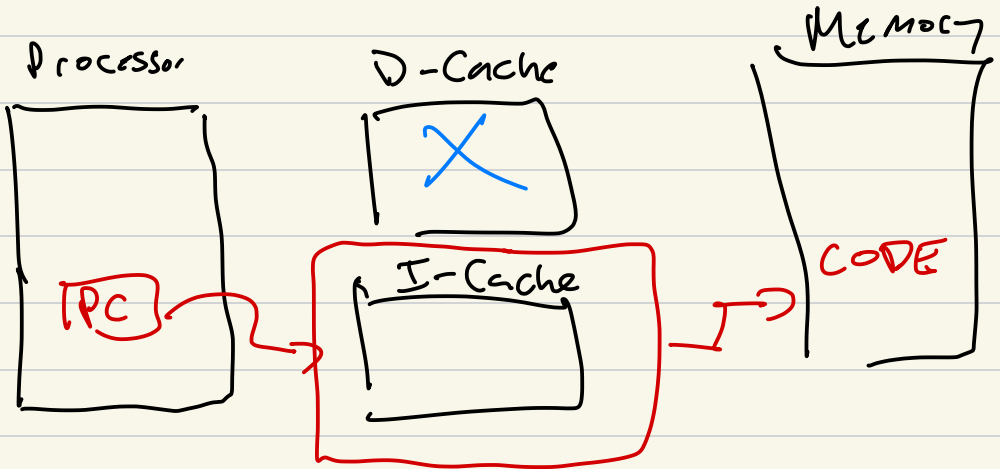
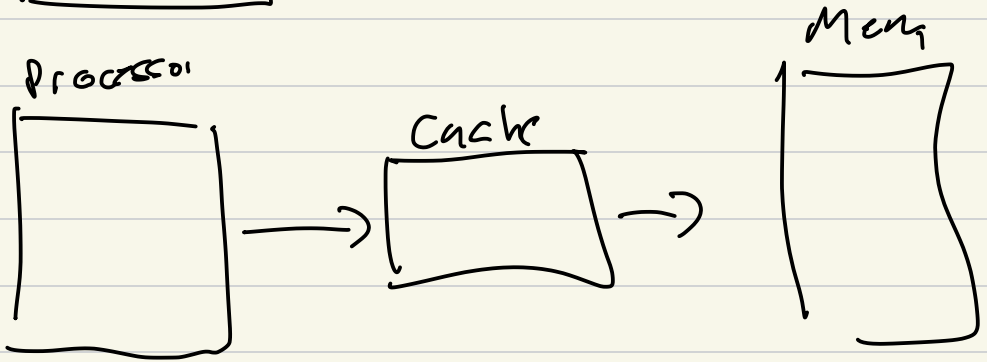
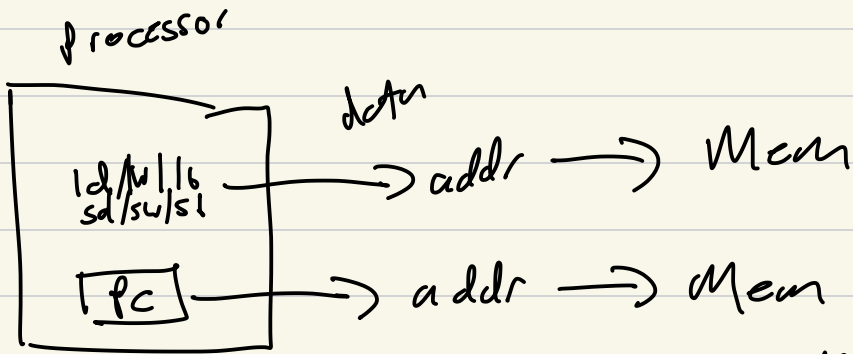
$4 \text{ Slots } \text{addr}_w = \text{addr}_b / 4$
 $\text{slot} = \text{addr}_w \% (\# \text{slots})$
 $\text{addr}_w \% 4$



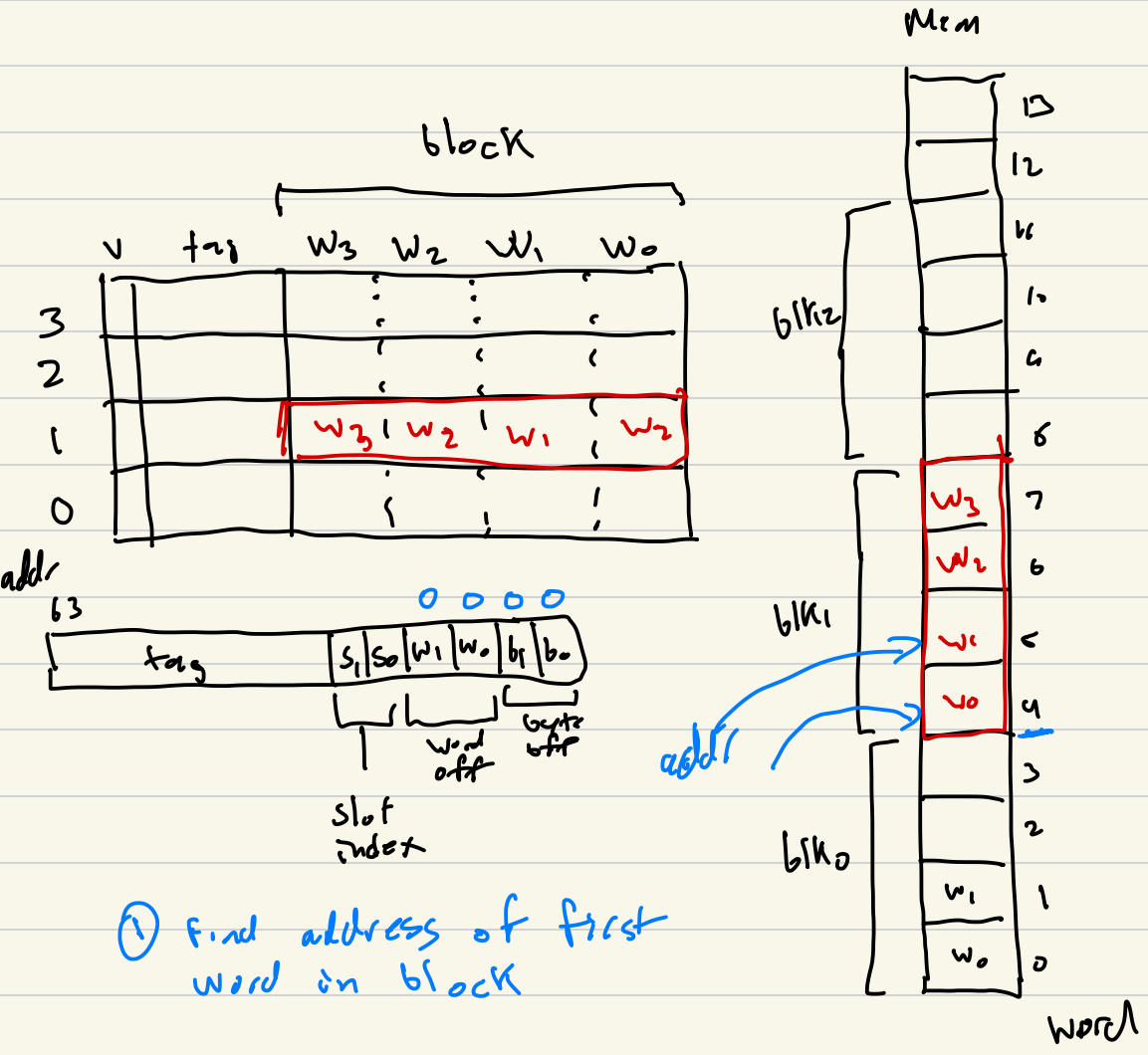
slot =



Instruction Cache vs Data Cache



Block size / Why? Principles of locality
Spatial & temporal



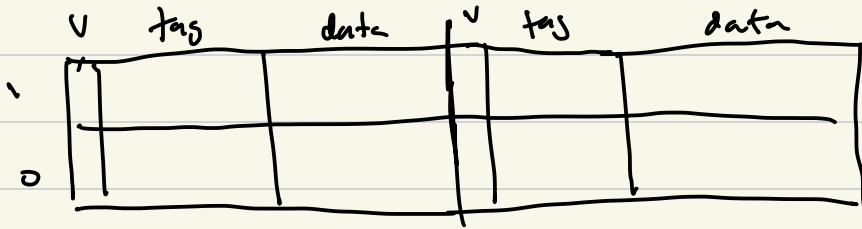
① Find address of first word in block

Word addr 4 = 100 << 2
 byte → 0610000

Set Associative Cache

Way 1

Way 0



set index

Slot array (slots)

