CSE370: Introduction to Digital Design
Autumn 2001

Homework Set 9

For final exam review; not to be turned in

I don't have prepared solutions for these. Feel free to discuss the problems among yourselves; on the mailing list; or with course staff.

Katz 8.7, p.435 (reverse engineering)

Katz 8.21, p.441 (washing machine).

Katz 8.27, p.444 (vending machine).

Referring to the "CSE370 Processor":

> How can you tell that this is not a "Harvard" architecture? How would you modify the design to make it so?
>
> Trace through the complete execution of an instruction (other than the one in the notes).
>
> Is it possible for one instruction (take the add, for example), to have the same register used for both inputs and the output?
>
> Suppose the clock frequency is 16MHz. What is the CSU speed, in instructions per second? (not as simple as it seems!)