Lab 2 Rapport

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1 Questions and answers

What have you learned in the lab?
We've learned to how to work with *branch* and *lw* properly when using a pipelined mips, and why we have to use certain methods in order for them to work as they should.
What was most dificult in the lab?
Rewriting the code to make it work in pipeline-mode.
Did you use SyncSim while writing/debugging code? When/how?
Not much at all, we just made sure that our changes worked, and if they didn't we checked our codefile instead of debugging with SyncSim.
How many cycles did lab 1b take to execute, running in the no-pipe mode?
It took us **24033** cycles to get our finished text decoded!
How many cycles did lab 2 take to execute without the interrupts, running in the pipelined mode?
It took us **27876** cycles to get our finished text decoded! Using the formula that was provided in the lab-material we got a result of 3.449, the result would've been closer to 4 if we wouldn't have had a couple of *nop* left in the code.
How many cycles did lab 2 take to execute with timer interrupts, running in the extended mode? Explain the extra clock cycles.
It took us **28194** cycles to get our finished text decoded! First of all the code initiates the interrupt, and after approximately 1000 cycles the code interrupts. After the interrupt a couple of lines of codes are ran to resume the program.
How many cycles did lab 2 take to execute with timer and input interrupts, running in the extended mode? Explain the extra clock cycles.
It took us **31501** cycles to get our finished text decoded! It works just as above but with further more cases where it has to run the interrupt/resume-code which is when using the input as well.