Lab 1b Rapport

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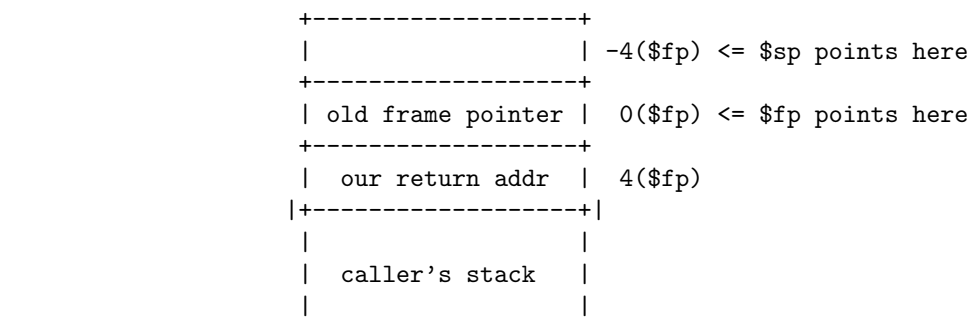
1 Questions and answers

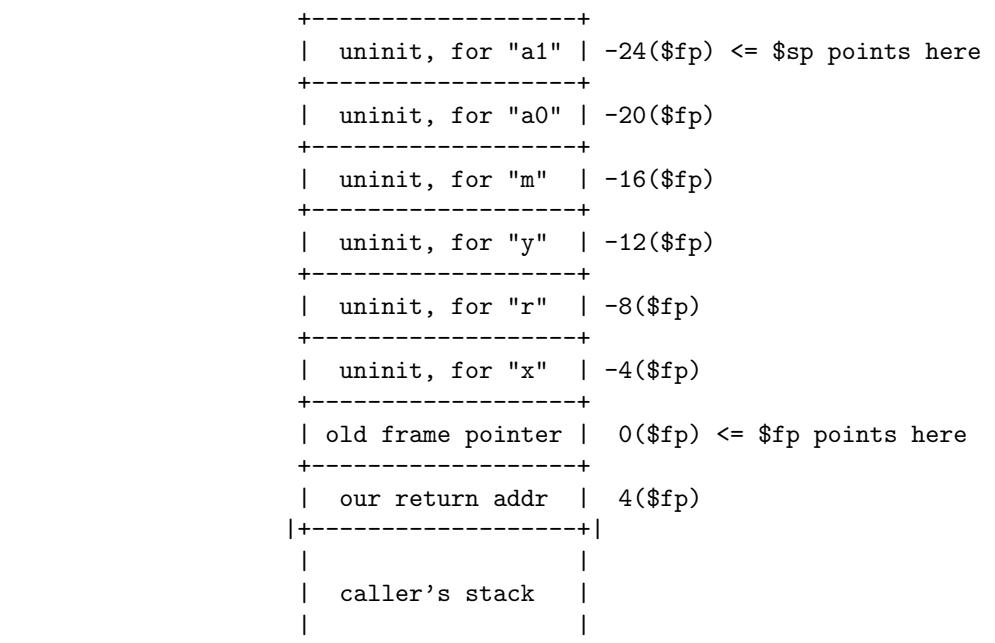
What have you learned in the lab?
In this laboration we have gotten more knowledge and experience with using stacks and recursion. What differs mostly from the last laboration is that we are now using more than 1 "function" which leads to us having to be more careful and really thinking through what we are doing and what consequenses it can lead to. This laboration have also been requiring alot more debugging from our side than the last one did.
What was most dificult in the lab?
The most dificult thing in the laboration was understanding how everything works because of how abstract it all was.
Did you use SyncSim while writing/debugging code? When/how?
We probably would never been able to complete the lab without syncsim because we used it to (stepwise and with breakpoints) debug the code after pretty much every change when we progressed a bit into the lab.
How many clock cycles did it take to execute the program?
It took us 24033 cycles to get our finished text decoded!

2 Diagram

codgen:



decode:


uninit, for "a1"
-24($fp) <= $sp points here
uninit, for "a0"
-20($fp)
uninit, for "m"
-16($fp)
uninit, for "y"
-12($fp)
uninit, for "r"
-8($fp)
uninit, for "x"
-4($fp)
old frame pointer
0($fp) <= $fp points here
our return addr
4($fp)
caller's stack