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## README

Our initial problems extending from the project were understanding of the instructions. The instructions used a lot of high level language that we were not all that familiar with so before we could start, we had to do a lot of research into what the project was asking us to do. This slowed down the process significantly.

Our research started with looking up 4-bit Carry Look Ahead Adder diagrams in order to visualize what we would be ultimately implementing. When we started implementation, we originally confused the logic of the diagrams with the inputs specified in the question. After realizing our error, we reworked our program to match what we thought was being asked of us.

It took us a while but we began to understand and we got the 4-bit carry look ahead working from there it was just to look at diagrams to help implement the 4bit ALU. After that we imported the test bank and ran the simulation. We error to debug; this took us a while as we at points didn't quite understand what some errors meant. When we got it debugged and ran the simulation our result didn't quite look like professor Bloom's our and again we couldn't understand. We tried to understand but came to no avail so we just continue with project.

We Implemented the 16bit and 32bit ALUs fairly easy. Creating the test bank was again a task in which we had no clue really how to do it. We did some research but still didn't quite

grasp it. So what we did in the end was look at the test bank giving to us and adapted it to how we think it should work for the 32bit ALU.

When it came to ALU control again we were sure what to do as we had problems understanding the figures given and how to follow them. At this point time was running out so we decided just to make a skeleton of the ALU control file and just send in what we had.

Resources: 4Bit Carry Look Ahead Adder Diagram

[https://upload.wikimedia.org/wikipedia/commons/thumb/0/04/4-](https://upload.wikimedia.org/wikipedia/commons/thumb/0/04/4-bit_carry_lookahead_adder.svg/2000px4bit_carry_lookahead_adder.svg.png)

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