* 1. First run attempt

A screenshot of a computer

AI-generated content may be incorrect.

* 1. Unsupported instruction error

A screenshot of a computer error message

AI-generated content may be incorrect.

* 1. Difficulties

1.3.1 I could not find the right buttons intuitively and it did take me a minute to figure out how to compile the code. This is because the button names that I assume should be showing up if you hover over a button were not showing up. This is the button to compile btw:  
 

* 1. Implementing ‘write\_string’ function

The only major issue I ran into was when I called the second jal on line 38. This was the code at the time.

A close-up of a text

AI-generated content may be incorrect.

A close-up of a white background

AI-generated content may be incorrect.

It would just stall on the ecall line and not move forward. I did lose a lot of progress the first time this happened so before running from then on, I would save a copy to my download as a temp location. If it worked, I moved it to the main git repo and uploaded it.

Eventually, after I watched the registers and moved the program line by line, I noticed that these lines were backwards:



I needed to save a0 into a0 (aka do nothing with a0) and save sp into a1. This being the case, addi a0, a0, 0 is redundant so I removed the line and changed the second line to mv a1, sp. This fixed the issue and allowed me to finish up v2.0.

2.2 Implementing the ‘read\_string’ function

This was also fairly straightforward. After thinking through which register I needed to save the sp and 100 I got it to work quickly. I didn’t run into any major issues with this one.

3.1 Implementing the ‘putchar’ and ‘puts’ functions