

## Lab 1 Report

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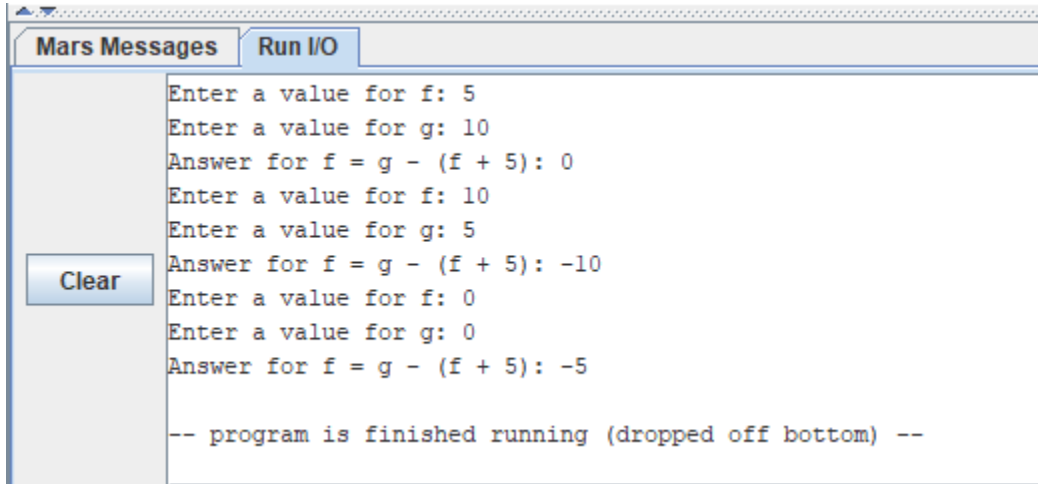
List of Assembly Code Files:

- lab1.asm

Summary of Project Implementation:

In this project I created a program which asks the user for a g and f value, and then uses those values in the equation " $f = g - (f + 5)$ ", and then it displays the value computed from this equation. It repeats these steps three times using a loop.

Results:



```
Enter a value for f: 5
Enter a value for g: 10
Answer for f = g - (f + 5): 0
Enter a value for f: 10
Enter a value for g: 5
Answer for f = g - (f + 5): -10
Enter a value for f: 0
Enter a value for g: 0
Answer for f = g - (f + 5): -5

-- program is finished running (dropped off bottom) --
```

Conclusion:

The biggest problem I faced while completing this lab was trying to figure out how to create a loop in MIPS. I was struggling because I forgot about the bgt instruction, which allowed me to create a loop that runs exactly three times. After I implemented bgt, the program worked as expected. One lesson I learned while completing this lab was the importance of addi, as opposed to add. Whenever I had to add a constant to a register I was using add instead of addi which led to some unexpected problems. After I switched to addi, everything worked as intended.