1 Introduction

During lab 3, we were introduced to the Pinky Machine Architecture. We started using the C language for the Pinky Machine Architectural simulator.

2 Discussion

We first started writing the OpCodes for the Pinky Machine and set up the Register array, then the instructions: Halt, Load, Store, Add, Sub, Logical And , Or etc. In order to make things work, we have an Instruction Memory, also known as IM which was an array of unsigned integer with 32-bits. During the executions, we loaded 3 values (i=5, x=10, z=20), and then we added x and 5 and stored in y, and then subtracted 5 from z and store in w. (During the executions, we loaded the values from memory to the register and then re-store them in the memory.)

3 Results Analysis

After running the program, we noticed the following: "R[0] = 5 R[1] = 10 R[2] = 20 R[3] = 15".

4 Conclusion

After the lab 3, we studied the Pinky Machine Architecture using its simulator with C language.