**UNIVERSITY OF MISSOURI - COLUMBIA**

ECE 4270: Computer Architecture

Lab 2: MIPS Assembler

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Overview:

The objective of this project was to develop an assembler for the MIPS instruction set architecture. The input is an input of a program in MIPS Assembly and the output is turned into MIPS machine code. In order to solve this, we will start by reading in the data and finding the function through the opcode. Then we will assign hex values to specific registers according to the MIPS architecture. Once this is done, we’ll create a function to print the new hex values and from there we can begin to test the code.

Group Work:

1. As a group:
2. Joy
   1. Create bubble sort algorithm to sort in ascending order. Also creates a program to find Fibonacci numbers of 10.
3. Kaleb
   1. Defined what each instruction is in hex. Assigned each hex value to its corresponding registers.
4. Joe
   1. In charge of reading in the data. Also created a function to find the opcodes.