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CSCE 212
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Project 1

## 1.0 Program Input/Output

Program 1: So, for program 1, the MIPS code is functioned to greet the user with their name. So the user inputs their **name**, and the mips outputs **hello name.**
User Inputs:

Program 2: So, for program 1, the MIPS code is functioned to take the user's input and solve an equation. The given equation was **F = (a+b) – (c+d) + (b+3).** Mips gets the **4 integers a, b, c, and d** from the user and calculates F for them. This code was really tricky to work with. It took me a while to understand and implement the logic in mips code. But I somehow I figured it out. I wasn't able to figure this program out. I didn't know how to fix this program
User Inputs: a = 1, b = 2, c = 3, d = 4;
Mips output F = -4

## 2.0 Program Design

Program 1:

- Mips asks the user's name
- User enters their name
- Mips greets them by saying hello with their name
- End of the program and code.

Program 2:

- Mips asked 4 ints from the user
- The user enters them
- Mips calculates
- And solves for F.

## 3.0 Symbol Table

| Register | Purpose & Label |
|---|---|
| $a0, $a1 | Are used to pass arguments |
| $v0, $v1 | Are to hold return value |
| $t0 - $t5 | Are used to register numbers |
| $s0 - $s3 | Are used to register numbers |

**4.0 Learning Coverage**

- MIPS code syntax and structure
- Addiction , Subtractions
- convert equation to MIPS code
- learned how to use MARS
- learned the logic of MIPS assembly code

**5.0 Test Results**

Program 1:

```
Hello, may I have your name, please?
Siona
Hello, Siona

-- program is finished running --
```

```
Hello, may I have your name, please?
Martin Ravi
Hello, Martin Ravi

-- program is finished running --
```

Program 2:

```
Enter int a =  1
Enter int b =  2
Enter int c =  3
Enter int d =  4
 F = -4
-- program is finished running --
```

```
Enter int a =  2
Enter int b =  3
Enter int c =  2
Enter int d =  5
 F = -2
-- program is finished running --
```