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Week 7 - Refining the Editing Process

Instructions

- 1. Copy the week_7 folder into your CSIS11_Student/assembly folder.
- 2. Follow the assignment by writing code or pasting images from the simulator into your README file.
- 3. If the assignment asks for a program file, place the file in the code folder with the assigned name
- 4. Once you've completed the assignment, commit and sync with your remote repository.

Refining both your editing skills and your knowledge of LC-3 Assembly code

Objectives

- 1. More intensive coding to refine your editing process
- 2. Using branches to add decision-making abilities
- 3. Using Traps for I/O in ASCII characters

Assignments

Use *trap_branch.asm* for all of the assignments below. In some of the assignments, you will need to modify code and take a screen shot. In others, you will be simply adding code.

1. Change the beginning headers (*TITLE* and *DESC*) to be text you want for your *Simple Math Calculator* (*SMC*) and take a screenshot showing the new text. You will need to run the program to have the headers display in the *console* window.

Change this image to be a screenshot for the assignment.

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2. Determine the decimal number (0-9), from the ASCII input and store each digit in a separate memory location. Be sure to document the code.

3. Output the four digits in a row, so that it is easy to view and think of them as a 4 digit decimal number. The first digit needs to be the leftmost digit and the last digit would be the rightmost digit, just as you would right them. Run the program then capture a screenshot of the input and the output of the numbers.

Change this image to be a screenshot for the assignment.

4. Combine the four numbers in Step 3 into a four digit number, with the rightmost digit being a 10⁰ digit, second digit from the right, 10¹ etc. Store this new decimal number in a memory location. Document the code.

Once you have finished all four assignments, be sure to commit and sync your commits to your Github account.

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ASCII TABLE

0 0 0 0	Decimal	Hexadecimal	Binary	0ctal	Char	Decimal	Hexadecimal	Binary	0ctal	Char	Decimal	Hexadecimal	Binary	0ctal	Char
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