CST250 Project 2: UART Number Input

Learning Objectives:

- Interact with a memory mapped input/output (I/O) device
- Implement a device driver using I/O polling

The Task

In this project you will be working individually to creating a program that converts an ASCII string into a value held in a single register. An equals character ('=') will be used to indicate the end of a number. The result of your conversion should be put in register *$v0*. You do not need to handle checking if a character is something other than a number or an equals sign (=). Only positive numbers need to be handled and overflow checking is not required.

Following each number input the calculator should revert to a state where it is ready to take another number as input. In other words, manually resetting the PLPTool simulation between numbers **should not** be required. It should be ready and waiting for another input after processing the previous input without resetting *$v0*.

Input String	Result ($v0)
1=	1
256=	256
12345789=	123456789
1025	1025

More information about the PLP UART can be found here.

Deliverables:

1. Submit your program on blackboard with the format: lastname_project2.plp. (16 points)
2. Take the Post-Project 2 assessment (4 points)