**ECE 4612/5612 Fall 2023**

**MIPS Assignment #2**

Due: October 11th, 2024 by 5:00 pm

File-name format: MIPS2-YourName

You are supposed to write a MIPS program to check validity of a user-inputted numerical expression via MIPS simulator I/O window. The syntax for the expression should be based on Matlab rules. Your program should display the prompt “>>>” for entering an expression of up to 64 symbols. Expressions should include only parentheses (), digits from 0 to 9, and operators +, -, \*, / and spaces. If there is error in an expression, display “Invalid input” in the I/O window; if there is no error, display “Valid input” in the I/O window.

**Your program should loop** so that users can enter new expressions without re-assembling the program. Your code should be commented.

**You are required to submit a full report for this assignment.**

Your report should include:

* Cover page:
  + Assignment
  + Full name
  + Course number
  + Date
* Objective(s) of the assignment
* Tools/equipment
* Analysis/algorithm/procedure
* Test/Results/observations
* Conclusions

Make sure that you

* Number all figures in your report
* Annotate/explain your simulation results
* Submit both your report and your code