



Final Project

Simple Interpreter

It's required to implement a simple interpreter that executes instructions and print the result of each instruction.

Example for input and output:-

Enter the expression (or "end" to exit): $X = 12.5$
The value of entered expression = 12.5
Enter the expression (or "end" to exit): $Y = X * 4 / 5$
The value of entered expression = 10.0
Enter the expression (or "end" to exit): $Z = X * Y / 5$
The value of entered expression = 25.0
Enter the expression (or "end" to exit): $M = Z * N$
Error Invalid Symbol N
Enter the expression (or "end" to exit): $M = 11 + (Z - 2.5) / (X + Y)$
The value of entered expression = 12.0
Enter the expression (or "end" to exit): end

Notes

- Your program should support any type of numbers (float or int) and numbers may be one or more digits.
- Variable names may be any length of characters not only a single character.
- Definition of variable more than once must overwrite the old value.
- You should handle the following errors
 - Invalid Symbol
 - Missing = in the expression
 - Left hand side should only one variable → example $x + y = 5$ should generate an error.
 - Invalid expressions → example $(x + y) / (3 + 1)$

Policies

- You should work in groups of **three**.
- If 2 or more copies are discovered, all copies will lose all the marks of year work. Hence, it is better to deliver nothing than delivering a copy.
- You should develop the assignment using C language.
- No late submission is allowed.