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Lab02

Report02

The objective of this assignment is to implement a simple algebraic program. Creating a program to do the simplest of basic functions of a calculator to solve equations and interpret the strings/equations in the form of ex. 1+1.

Important variables used in the assignment are imports, the functions, find, and a while loop.

The import used was regex and sys, implementing simple regular matching expressions from strings.

While import sys was used to help with ending the program when the user implemented the variable to prompt the function.

The functions to have the user input info and check the info to validate if the information entered are correct, if not it would print out an invalid statement.

Functions were – run, invalid, checkinfo, math

Run – this function was used to prompt the user to input an expression and then run it through the fuction, checkinfo to see if it was a valid statement to then run it through the function math. However if the user inputs the letter “Q”, it would automatically end the program due to the import sys’s effect.

Invalid – this function is used to print out the statement, “Invalid” if it were to be invalid statement.

Checkinfo – The function was used to check the information and see whether it would be a proper expression or number and return true.

Math – this function is the main operations for this program, where it would have the expression broken down to find the operands of the equations and see how it would be solved and then afterwards do out the math and solve the equations.

.find is to get the position of the numbers that are within the list.

A while loop to repeat the program after entering expressions to keep it going, like a calculator.

To practice using strings, while loops, and if statements.

Problems that I have encountered for this program assignment was definitely getting the calculator to hand parentheses. And to detect the invalid forms of the parentheses problems/equations. AS well as getting the program to be requesting the last three entered expressions.