

User Guide to binaryCircuitAddingProgramOOP.py

Program goal:

1. Ask user for two 4 digit binary numbers
2. Compute the sum of two numbers
3. Display values along with the result in both binary and decimal
4. Write values and result in both binary and decimal into a file

This program is fully implemented with object-oriented programming and a class AddingCircuit. This facilitates the reusability of the program, variables and methods.

First the program creates an instance of AddingCircuit class and it's called addition.

Then the program asks user to come up with two 4 digit binary numbers, for example 0101 and 1111. It is important to write the binary numbers with the leading zeros, otherwise the result will not be calculated properly.

The user will be prompted to enter the numbers digit by digit followed by enter. Because these are binary numbers, the user can only input 0's and 1's. If the digit input by user does not fall into this category, a value error will be raised, and the user will be asked to enter all the digits from the beginning.

After the result is computed and displayed/written in, the addition object will be deleted, and the user will be asked to continue or quit the program. To continue user can press any character followed by enter or press 'q' and enter to quit.

The results written in the file will not be deleted and new results will be appended every time the program runs.