Developing Recursive and Iterative Sum Calculator

ICT1002 Programming Fundamentals

In this task, we need to design one recursive function to calculate the SUM value of one input number. The SUM of x is defined as the summation of all the positive numbers that are not bigger than X, such as 1+2+3…+X. So please design one recursive function sum_recursive(x) to return the SUM value of x. In addition, please implement another function sum_iterative(x) to return the SUM value of x with the iterative manner (e.g. for loop). Write the main program to allow users to input one number to your program and call these two functions to see whether they get the same output. The example executions are shown as follows:

*Note: Your output should be in **ONE line***

Running example:

```
C:\ICT1002\Lab4\SumCalculator> python SumCalculator.py 3
The SUM value calculated by recursive is 6 and by iterative is 6.
```