

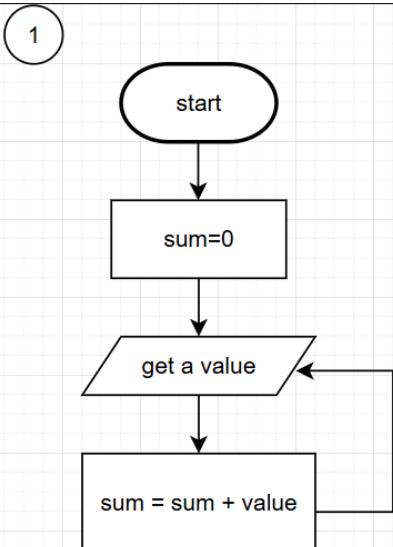
Activity No. 1.1

Using Pseudo-code Statements and Flowchart Symbols

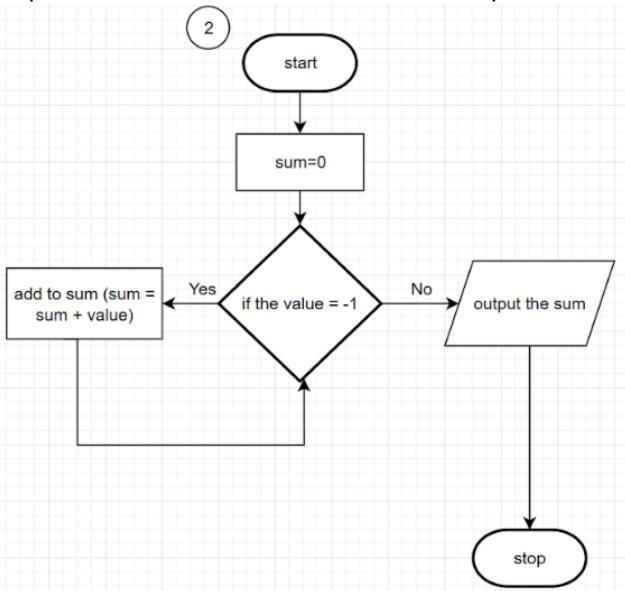
Course Code: CPE007	Program: Computer Engineering
Course Title: Programming Logic and Design	Date Performed: 8/5/25
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Name(s): Juan Paulo C. Lara	Instructor: Engr. Jimlord M. Quejado

6. Output

Problem 1: (Infinite Algorithm) The problem with this algorithm is that, some of the steps appear more than once, i.e. step 5 get second number, step 7, get third number, etc. One could shorten the algorithm or flowchart as follows:



Problem 2: (Finite Algorithm) The new list of numbers is given as 26, 49, 498, 9387, 48962, 1, -1. The value -1 is a unique number since all other numbers are positive. This means that the procedure will stop once -1 is encountered.



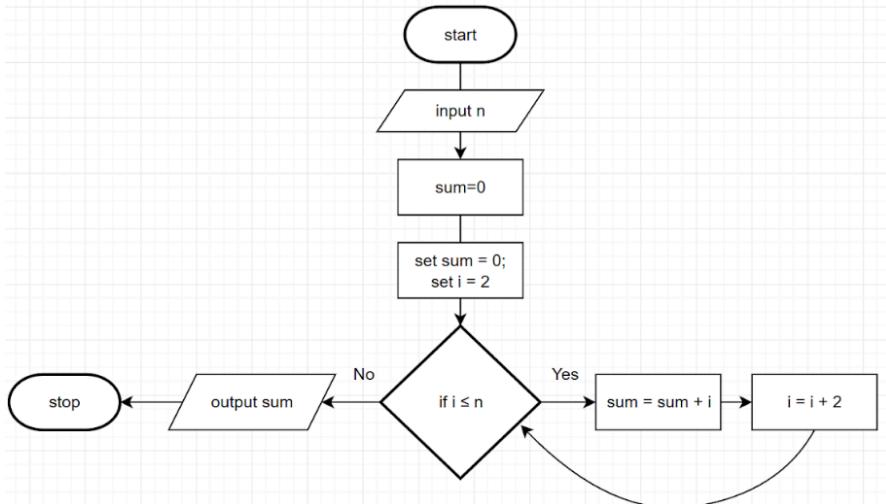
7. Supplementary Activity

1. Design an algorithm and the corresponding flowchart for finding the sum of the numbers 2, 4, 6, 8, ..., n (output: Algorithm and Flowchart)

```

start
input n value
set sum = 0
set i = 2
if i ≤ n
then sum = sum + i
i = i + 2
else output sum
stop

```



2. Write an algorithm to read 100 numbers and then display the sum.

```

start
(sum = 0)
(count = 1)
if count ≤ 100
then input number
sum = sum + number
count = count + 1
else output sum
stop

```

3. Write an algorithm to read two numbers then display the largest.

```

start
(1st value = 0)
(2nd value = 0)
input 1st value
input 2nd value
if 1st value > 2nd value
then output 1st value
else output 2nd value
stop

```

4. Write an algorithm to read two numbers then display the smallest

```

start

```

```
(1st value = 0)
(2nd value = 0)
input 1st value
input 2nd value
if 1st value < 2nd value
then output 1st value
else output 2nd value
stop
```

5. Write an algorithm to read three numbers then display the largest.

```
start
input number1
input number2
input number3
set largest = number1
if number2 > largest
then set largest = number2
if number3 > largest
then set largest = number3
output largest
stop
```

6. Write an algorithm to read 100 numbers then display the largest.

```
start
set largest = number
set count = 1
input number
if count ≤ 100
then input number
if number > largest
then set largest = number
set count = count + 1
else output largest
stop
```

8. Conclusion

Concluding this activity, I have learned how algorithms input, process, move, and output data with pseudo-code statements and flowcharts. The basic symbols of the flowcharts enable me to understand how code can function in a visual perspective. This activity and discussion in the past weeks also taught me how to write pseudocode and create flowcharts that a coder can clearly comprehend.

9. Assessment Rubric