

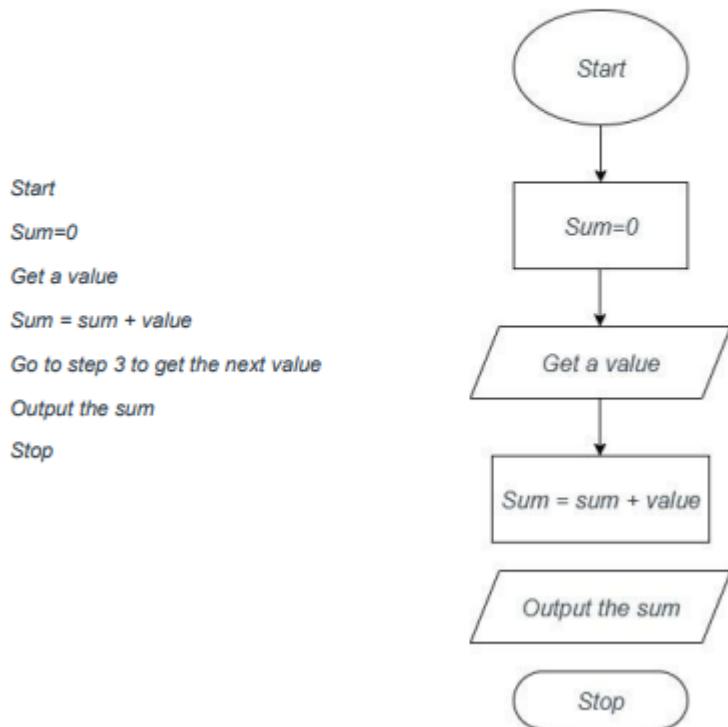
Activity No. 1

Hands-on Activity 1.1: Using Pseudo-code Statements and Flowchart Symbols

Course Code: CPE 007	Program: Computer Engineering
Course Title: Data Structures and Algorithms	Date Performed: Aug 1, 2025
Section: CPE11S1	Date Submitted: Aug 1, 2025
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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.

Start

Sum=0

Get a value

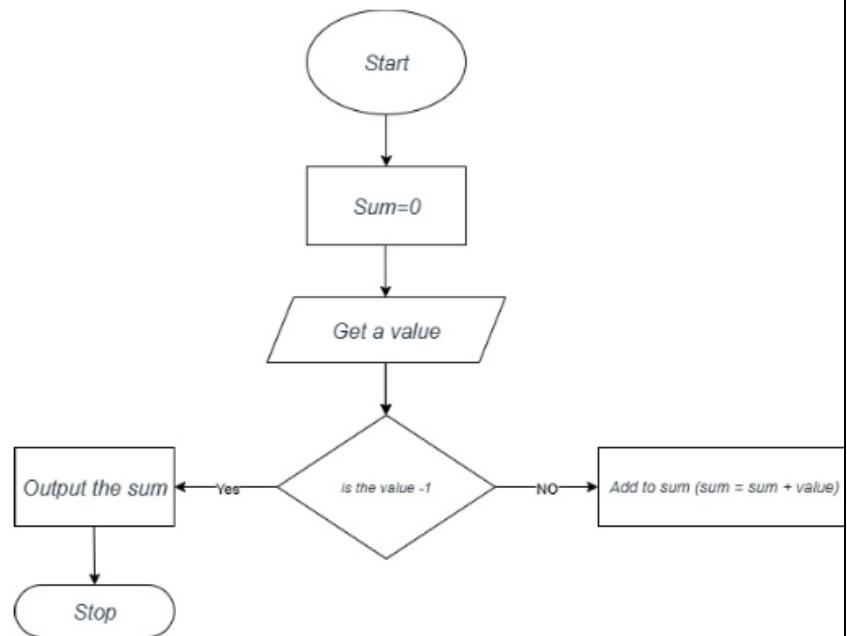
If the value = -1, go to step 7

Add to sum (sum = sum + value)

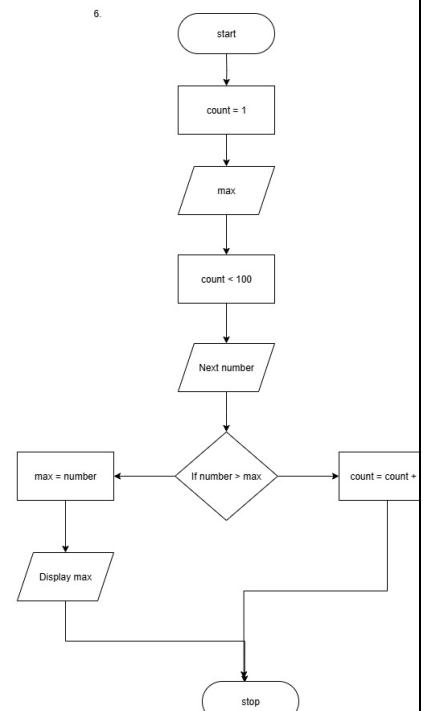
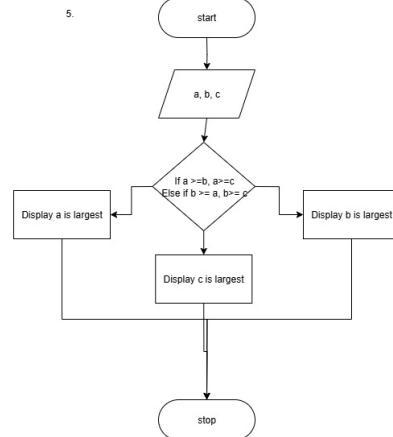
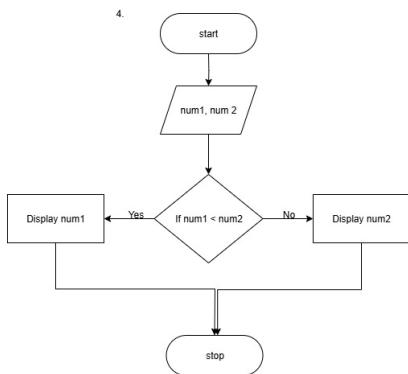
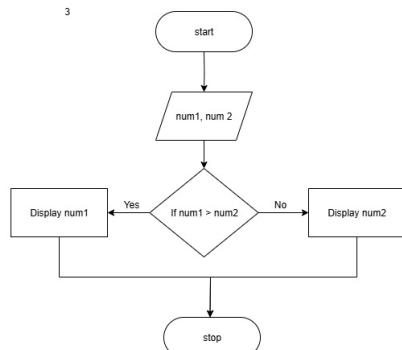
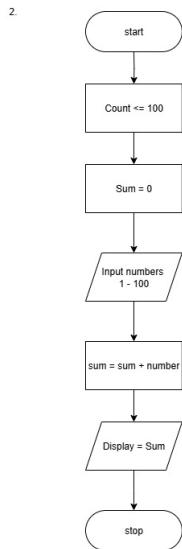
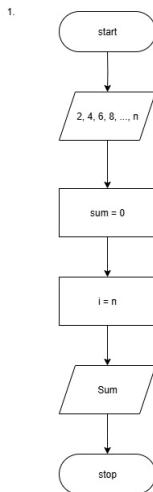
Go to step 3 to get the next value

Output the sum

Stop



7. Supplementary Activity



8. Conclusion

9. Assessment Rubric

Rubric for SO 7 (1)							
Criteria	Ratings						Pts
⌚ SO 7 PI 1 IILO4 Utilize lifelong learning skills in pursuit of personal development and excellence in professional practice. threshold: 4.8 pts	6 pts Excellent Educational interests and pursuits exist and flourish outside classroom requirements,knowledge and/or experiences are pursued independently and applies knowledge learned into practice	5 pts Good Educational interests and pursuits exist and flourish outside classroom requirements,knowledge and/or experiences are pursued independently	4 pts Satisfactory Look beyond classroom requirements, showing interest in pursuing knowledge independently	3 pts Unsatisfactory Begins to look beyond classroom requirements, showing interest in pursuing knowledge independently	2 pts Poor Relies on classroom instruction only	1 pts Very Poor No initiative or interest in acquiring new knowledge	6 pts
⌚ SO 7 PI 2 IILO4 Utilize lifelong learning skills in pursuit of personal development and excellence in professional practice. threshold: 4.8 pts	6 pts Excellent Completes an assigned task independently and practices continuous improvement	5 pts Good Completes an assigned task without supervision or guidance	4 pts Satisfactory Requires minimal guidance to complete an assigned task	3 pts Unsatisfactory Requires detailed or step-by-step instructions to complete a task	2 pts Poor Shows little interest to complete a task independently	1 pts Very Poor No interest to complete a task independently	6 pts

<p>© SO 7 PI 3</p> <p>IILO4 Utilize lifelong learning skills in pursuit of personal development and excellence in professional practice.</p> <p>threshold: 4.8 pts</p>	<p>6 pts Excellent Synthesizes and integrates information from a variety of sources; formulates a clear and precise perspective; draws appropriate conclusions</p>	<p>5 pts Good Evaluate information from a variety of sources; formulates a clear and precise perspective.</p>	<p>4 pts Satisfactory Analyze information from a variety of sources; formulates a clear and precise perspective.</p>	<p>3 pts Unsatisfactory Apply the gathered information to formulate the problem</p>	<p>2 pts Poor Gather and summarized the information from a variety of sources but failed to formulate the problem</p>	<p>1 pts Very Poor Gather information from a variety of sources</p>	<p>6 pts</p>
<p>© SO 7 PI 4</p> <p>IILO4 Utilize lifelong learning skills in pursuit of personal development and excellence in professional practice.</p> <p>threshold: 4.8 pts</p>	<p>6 pts Excellent Ideas are combined in original and creative ways in line with the new and emerging technology trends to solve a problem or address an issue.</p>	<p>5 pts Good Ideas are creative and adapt the new knowledge to solve a problem or address an issue</p>	<p>4 pts Satisfactory Ideas are creative in solving a problem, or address an issue</p>	<p>3 pts Unsatisfactory Shows some creative ways to solve the problem</p>	<p>2 pts Poor Shows initiative and attempt to develop creative ideas to solve the problem</p>	<p>1 pts Very Poor Ideas are copied or restated from the sources consulted</p>	<p>6 pts</p>

Total Points: 24