

What is the Counter in Programming

Counter variable is basically used to keep track of count - how many times a piece of code is executed.

You can use any variable for the counter variable. But usually you should dedicate one variable to the task of counting, and use other variables for whatever other purposes you have.

A counter may be initialized with a value or defaults to an initial value. When called, it:

- returns its current value; and
- increments its current value

Example2:

Write an Algorithm and draw the flowchart to compute the summation of the given series:

$$S = 1 + 2 + 3 + 4 + 5 + \dots \dots \dots + N$$

Solution:

1-Start

2-Read the value of N

3-Let the initial value of the summation equals to zero(S=0)

4-Let the initial value of the counter equals to zero(I=0)

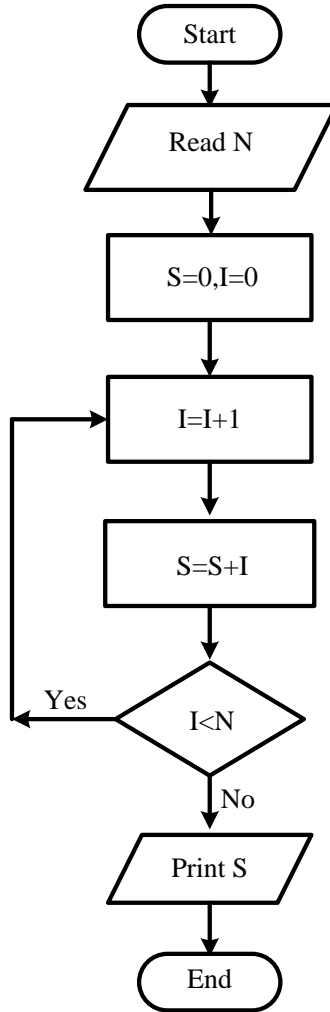
5-Increase the value of the counter by one (I=I+1)

6-S=S+I

7- If the counter (I)is less than N return to step 5

8-Print the value of the summation (S)

9-End



Example 3:

Write an Algorithm and draw the flowchart to print the numbers from 1 to 100 and print their squares:

Solution:

1-Start

2-Let the initial value of the counter equals to zero($I=0$)

3-Increase the value of the counter by one ($I=I+1$)

4- $M=I*I$

5- print I,M

6- If the counter (I)is less than 100 return to step 3

7-End

