Example 8:

Write an Algorithm to compute the average of ten numbers and draw its flowchart.

Solution:

1-Start

2- Let initial value of the summation equals to zero(Sum=0)

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

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

5-Read X

6- Sum=Sum+X

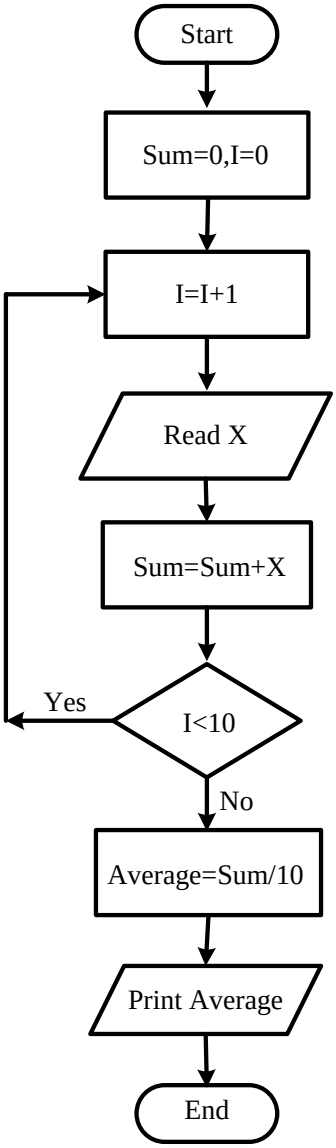
7-If the counter is less than ten, return to step 4

8-Averege =Sum/10

9-Print Average

10- End

The Flowchart of Example 8 is shown below:



Example 9:

Write an Algorithm and draw the flowchart to find the value of the equation:

$$Z = 1 + \frac{1}{2} + \frac{1}{3} + \frac{1}{4} \dots\dots\dots\dots\dots \frac{1}{150}$$

Solution:

1-Start

2- Let initial value of the summation equals to zero (Z=0)

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

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

5- $Z = Z + \frac{1}{I}$

6-If the counter is less than 150, then return to step 4

7-Print the value of Z

8-End

The flowchart of Example 9 is shown below: