## Example 10:

Write an Algorithm to find the summation of positive (+ve) and negative (-ve) values for 100 numbers.

Solution:
1-Start
2- Let initial value of the summation equals to zero $(\mathrm{Sp}=0, \mathrm{Sn}=0)$
3 - Let the initial value of the counter equals to zero ( $\mathrm{I}=0$ )
4 - Increase the value of the counter by one ( $\mathrm{I}=\mathrm{I}+1$ )
5-Read the value of X
6-Check that if $X>0$, then $\mathrm{Sp}=\mathrm{Sp}+X$
7- Check that if $X<0$, then $\mathrm{Sn}=\mathrm{Sn}+\mathrm{X}$
8 - Check that if $\mathrm{I}<100$, then return to step 4
9-Print the value of Sp and Sn
10-End

The flowchart of example 10 is shown below:


## Example 11:

Write an Algorithm to find the summation of the following series:
$S=2+4+6+8+10 \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots .$.
Solution:
1- Start.
2- Read the value of N .
3-Let the initial value of the summation equals to zero( $\mathrm{S}=0$ ).
4-Let the initial value of the counter equals to zero ( $\mathrm{I}=0$ ).
5 -Increase the value of the counter by one ( $\mathrm{I}=\mathrm{I}+1$ ).
$6-\mathrm{S}=\mathrm{S}+2 * \mathrm{I}$
7- If the counter (I) is less than N return to step 5.
8 - Print the value of the summation (S).
9- End

The flowchart of example 11 is shown below:


