

## Difference between flowchart VKSU and Algorithm

### Algorithm :-

- \* An algorithm is a specific set of instructions for carrying out a procedure or solving a problem, usually with the requirement that the procedure terminate at some point.
- \* It includes sequence of steps which depicts the procedure of the solution.
- \* It is hard to understand.
- \* It is easy to debug.
- \* There are ~~to~~ no defined rules for implementation.

### For example :-

Let the two numbers be A and B and their sum be equal to C. Then the desired algorithm is given as follows.

Step 1 START

Step 2 PRINT "ENTER TWO NUMBERS"

Step 3 INPUT A, B

Step 4  $C = A + B$

Step 5 PRINT C

Step 6 STOP.

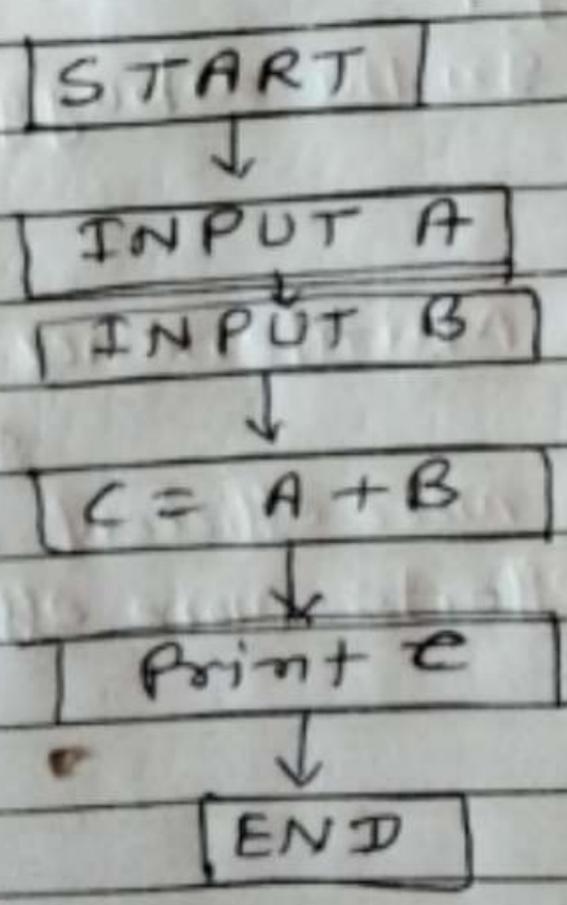


# Flow chart

- \* A flowchart is a graphical representation of a Program flow or an algorithm of a Problem to be Solved by a Computer.
- \* An information diagram made up of different shapes shows the data flow.
- \* It can be easily interpreted.
- \* Debugging a difficult.
- \* It is implemented on predefined rules.

For example:

The following figure shows ~~the~~ the flowchart for addition of two numbers A and B and Print sum C.



# Advantages of Flowcharts



## 1.) Communication:

In every concern it is a good tool if communicating the logic of a system.

## 2.) Effective Analysis:

Analysis is more effective if analysed using the flowchart.

## 3.) Proper Documentation:

It is used as good program documentation and used for different purposes.

## 4.) Proper Debugging:

In the debugging process it helps a lot.

## 5.) Efficient Program Maintenance:

It makes program maintenance more efficient and programmers can place efforts more efficiently on a selected part.

## Disadvantages of Flowcharts



### 1.) Complex logic:

For a complex logic or program flowchart becomes more complicated. A flowchart does not show that why a particular step is executed so to solve this problem a lot of comment boxes are used this will make a flowchart more cumbersome.

### 2.) Alterations and modifications:

Alteration in flowchart required completely re-drawing of that flowchart.

### 3.) Reproduction:

Flowchart reproduction is a big problem because symbol used in the flowchart cannot be typed.

### 4.) Time-consuming:

It is a time consuming process because it uses only various boxes which is not easy as typing.

### 5.) Subjective:

It is more subjective. So flowcharts created by two different programmers (for the same problem) may not be the same.