

Algorithm and Flowchart.

Algorithm :- The word Algorithm means "A process or set of rules to be followed in calculations or other Problem-solving operations."

Definition:- An algorithm can be defined as a finite collection of well defined steps designed to solve a particular problem.

Characteristics of Algorithm:-

1. Input :- An algorithm must take some inputs that are required for the solution of a problem.
2. Output :- An algorithm should produce certain output after processing the inputs.
3. Process :- An algorithm must perform certain operations on input data which are necessary for the solution of the problem.

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4. Finiteness:- Finiteness means that the algorithm should contain a limited number of instructions.

5. Effectiveness:- In Algorithm, each step must be unambiguous and definite

Example:-

- We will write an algorithm to add two numbers entered by the user

Step 1:- Start

Step 2:- Declare three variables a, b and sum

Step 3:- Enter the values of a and b.

Step 4:- Add the values of a and b and store the result in the sum variable i.e. $sum = a + b$.

Step 5:- Print sum

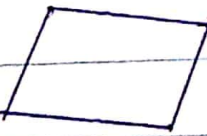
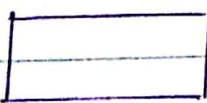
Step 6:- Stop

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Flowchart

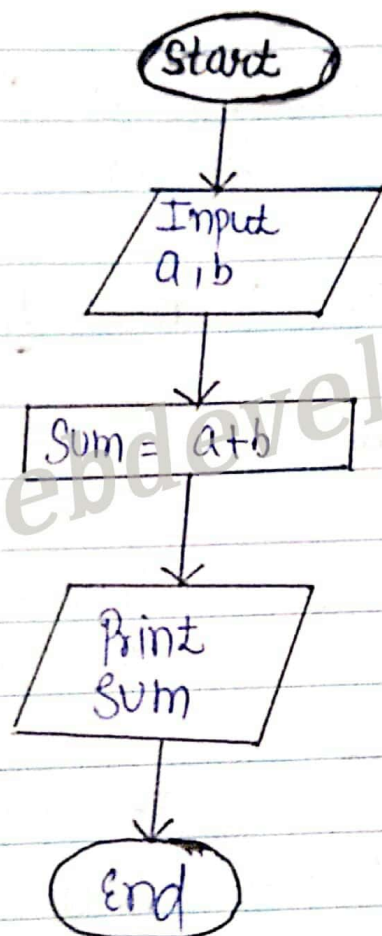
- Flowchart is a graphical representation of an algorithm.
- The Process of drawing a flowchart for an algorithm is known as "flowcharting".

Symbols Used In Flowchart :-

Symbol	Purpose	Description
	Flowline	Indicate the flow of logic by connecting symbols
	Terminal (Start/stop)	It represents the start and end of a flowchart.
	Input/Output	Used for input and output operation.
	Processing	Used for arithmetic operation.
	Decision	Used for decision making.

* Examples of Flowcharts -

Add two numbers entered by the user:-



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