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.

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

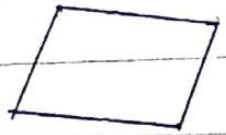
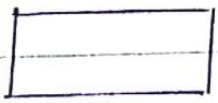
Step 6 :- Stop

STUDYBYNOTES

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 Flowchard :-

Symbol	Purpose	Description
	Flow line	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 :-