**Algorithm-** An algorithm is a finite set of instructions or logic, written in order, to accomplish a certain predefined task. Algorithm is not the complete code or program, it is just the core logic(solution) of a problem, which can be expressed either as an informal high level description as **pseudo-code** or using a **flowchart**

**Properties of Algorithm-**

* **Input**- There should be 0 or more inputs supplied externally to the algorithm.
* **Output**- There should be at-least 1 output obtained.
* **Definiteness**- Every step of the algorithm should be clear and well defined.
* **Finiteness**- The algorithm should have finite number of steps.
* **Correctness**- Every step of the algorithm must generate a correct output

Algorithm to add two numbers-

* Step 1: Start
* Step 2: Declare variables num1, num2 and sum.
* Step 3: Read values num1 and num2.
* Step 4: Add num1 and num2 and assign the result to sum. sum←num1+num2
* Step 5: Display sum Step
* 6: Stop

Algorithm to find the greatest in three numbers-

Step 1: Start

Step 2: Declare variables a, b and c.

Step 3: Read variables a,b and c.

Step 4:

If a > b

If a > c

Display a is the largest number.

Else

Display c is the largest number.

Else

If b > c

Display b is the largest number.

Else

Display c is the greatest number.

Step 5: Stop

Algorithm / Procedure to insert an element in an array-

• 1. If(M<N) then BACK=M+1 else STOP  
• 2. While (BACK>i) repeat steps 3 to 4  
• 3. REG[BACK]= REG[BACK-1]  
• 4. BACK=BACK-1;  
• 5. Reg[BACK]='X'  
• 6. M=M+1  
• 7. End.

Algorithm / Procedure to delete an element from an array-

1. Back=1  
2. While (Back<M) repeat 3 and 4  
3. Reg[Back]= Reg[Back+1]  
4. Back= Back+1  
5. M=M-1  
6. End

## Fibonacci Series Algorithm:

* Start
* Declare variables i, a, b , c
* Initialize the variables, a=0, b=1, and c =0
* Enter the number of terms of Fibonacci series to be printed
* Print First two terms of series
* Use loop for the following steps  
  -> c=a+b  
  -> a=b  
  -> b=c  
  -> increase value of i each time by 1  
  -> print the value of c
* End

0,1,1,2,3,5,8,13,21,34………

A,b,c

A, b,c