• ADVANTAGES & DISADVANTAGES OF ALGORITHM

Advantages of Writing algorithm :

→ Algorithm provides many advantages in programming. Some advantage of writing algorithm is given below.

* It translates the problem into a program.
* It helps us to find the error or debugging.
* It is language independent.
* To write an algorithm there there is no standered format.
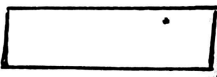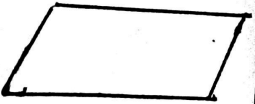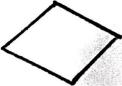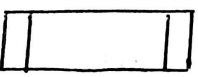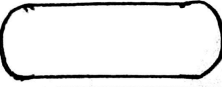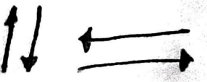* We can write algorithms by using any simple language.

• Disadvantage of Writing algorithm :-

Since algorithms provided many advantages in g programming. But it also has the disadvantage to write an algorithm. Some disadvantages of algorithms are :

* It's a time-consuming process.
* If The problem become large it difficult to write an algorithm.

2) • Flow chart.

The flow chart is the graphical representation of the algorithm. It is one of the widely used program design tools.

Symbol	Name	function
▭	Process	Indicates any type of internal operation inside the processor or memory
▱	Input / Output	Used for any Input/Output (I/O) operation Indicates that the Computer is to obtain data or output results
◇	Decision	Used to ask a question that can be answered in a binary format (Yes / No, True T/F)
○	Connector	Allows the flowchart to be drawn without intersecting In lines or without a reverse flow.
▢	Predefined Process	Used to invoke a subroutine or an Interrupt program.
▭	Terminal	Indicates the starting or ending of the program process, or interrupt program.
↑↓ ← →	flow chart	Shows direction of flow.

- ## flow Chart Examples

Example 1:- Draw flowchart for addition of two numbers

```
( Start )
    |
    v
/ Input Number 1,    /
/   Number 2.       /
    |
    v
[ Sum = Number 1 + Number 2 ]
    |
    v
/ Print Sum /
    |
    v
( End )
```
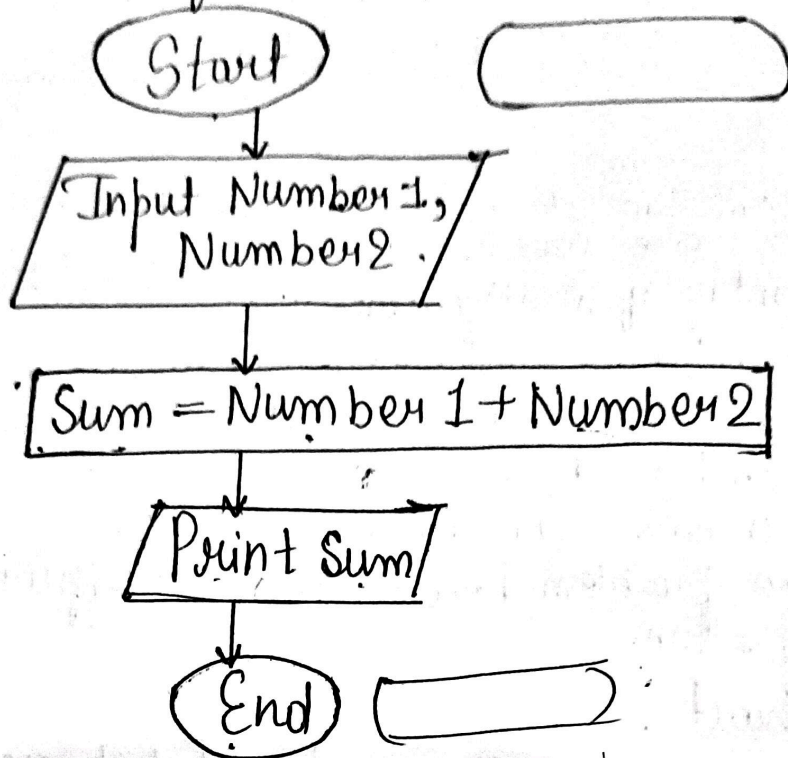
Example 2:- Draw flow chart to find whether given numbers is odd, even

```
         ( Start )
             |
             v
    / Input Numbers /
             |
             v
          < If
      Number % 2 == 0 >
      /              \
   Yes                No
    |                  |
    v                  v
/ Display        /   / Display        /
/ "Even Number" /    / "Odd Number" /
    |                  |
    +--------+---------+
             v
          ( End )
```
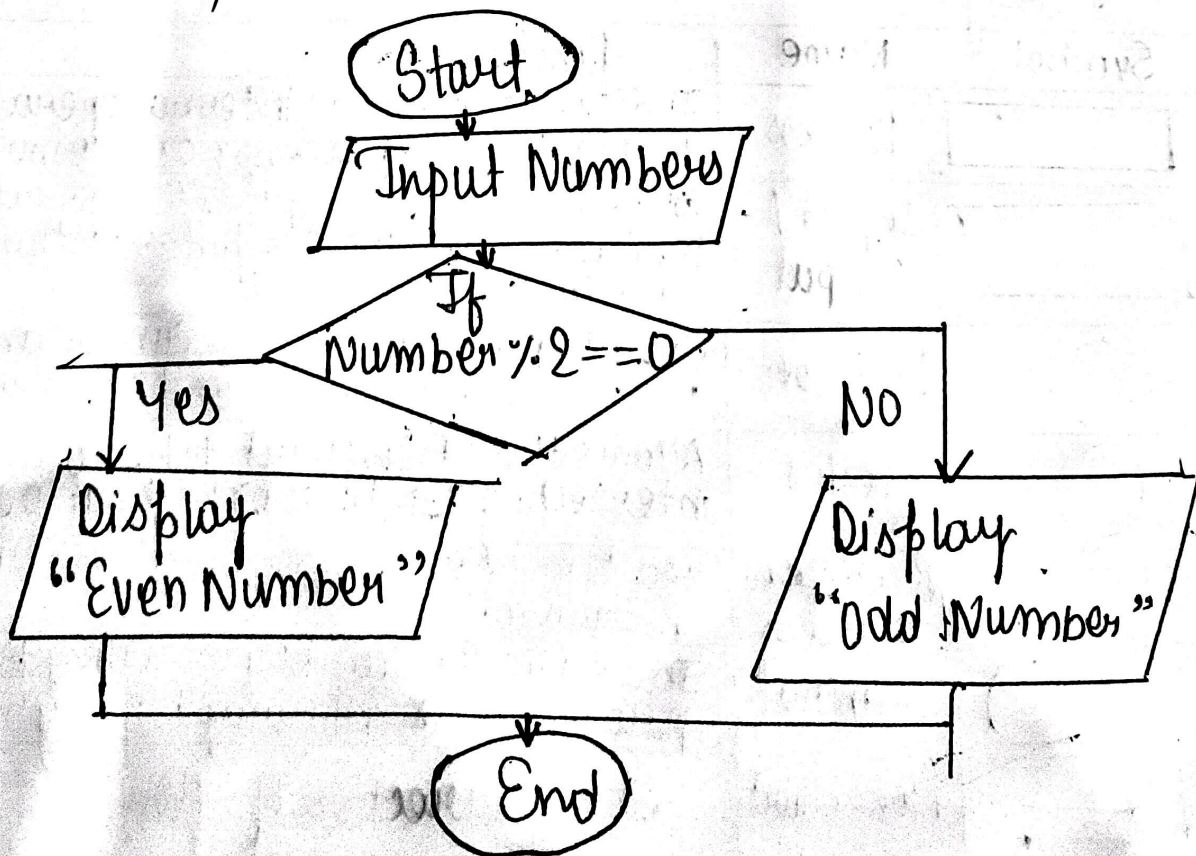
flow chart Advantages & Disadvantages

★ Advantages of using flowchart
→ It helps for program coding.
→ It helps to detect deficiencies in the program statement.
→ Flow chart helps to programmer to find the logic of the program.
→ It translate the problem into a program.

★ Disadvantage of using flowchart

→ Time - Consuming process.
→ To draw a flowchart various symbols must remember.
→ If the problem become very Large it is difficult on draws the flow chart.

ઋ: Pseudocode

Pseudocode is an informal way of programming description that does not require any strict programming language syntax. It is not on actual programming language. So If It cannot be compiled into an executable program

Example 1:
If Student's grade is greater than or equal to 60
Print " Passed ".
else
Print " failed".

- Difference between Pseudocode & Algorithm

The main difference between algorithm & an algorithm is a step by step process

Algorithm	Pseudocode
An unambiguous specification of how to solve a problem	An informal high-level description of the operating principle of a computer Program or other algorithm.
Helps to simplify and understand the problem	A method of developing an algorithm.

Q- What is a program?

Ans → A computer program is a set of instructions and as a term it can be used as a verb as well as a noun. In terms of a verb, It is used as a. Process of creating a software program by using programming language. In terms of a noun, an application, program, or application software is used to perform a specific task on the computer, for example, Microsoft Power Point is a application, which provides a way to create documents related to the presentation. Furthermore a browser is also an application which allows us to browse any website