



# ALGORITHM

# AND

# FLOWCHART



@BEINGPRO33



# ALGORITHM

**An algorithm is a Step By Step process to solve a problem, where each step indicates an intermediate task. Algorithm contains finite number of steps that leads to the solution of the problem.**

# HOW TO WRITE ALGORITHMS

**Step 1:** Define your algorithms input: Many algorithms take in data to be processed, e.g. to calculate the area of rectangle input may be the rectangle height and rectangle width.

**Step 2:** Define the variables: Algorithm's variables allow you to use it for more than one place. We can define two variables for rectangle height and rectangle width as HEIGHT and WIDTH (or H & W). We should use meaningful variable name e.g. instead of using H & W use HEIGHT and WIDTH as variable name.

**Step 3:** Outline the algorithm's operations: Use input variable for computation purpose, e.g. to find area of rectangle multiply the HEIGHT and WIDTH variable and store the value in new variable (say) AREA. An algorithm's operations can take the form of multiple steps and even branch, depending on the value of the input variables.

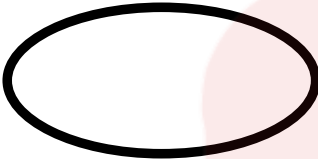


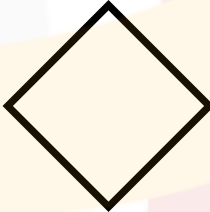
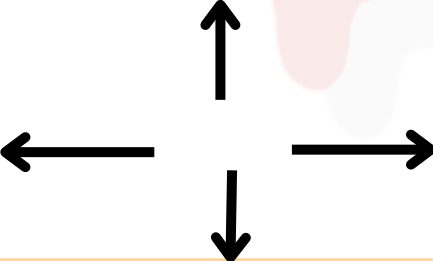
**Step 4:** Output the results of your algorithm's operations:

# **FLOWCHART**

**Flowchart is diagrammatic /Graphical representation of sequence of steps to solve a problem. Flowchart uses different symbols to design a solution to a problem.**

# **Rules and Guidelines to create the flowchart**

- **The flowchart must having the start and stop specification .**
- **The flowchart based flowlines never intesect with one-other.**
- **The symbols of the flowchart must be properly specified in the diagram.**
- **The flowchar never be divided.**
- **The flowchar never be created for the multiple process in the single one.**

Symbol Name	Symbol	function
<b>Oval</b>		Used to represent start and end of flowchart
<b>Parallelogram</b>		Used for input and output operation
<b>Rectangle</b>		Processing: Used for arithmetic operations and data-manipulations
<b>Diamond</b>		Decision making. Used to represent the operation in which there are two/three alternatives, true and false etc
<b>Arrows</b>		Flow line Used to indicate the flow of logic by connecting symbols