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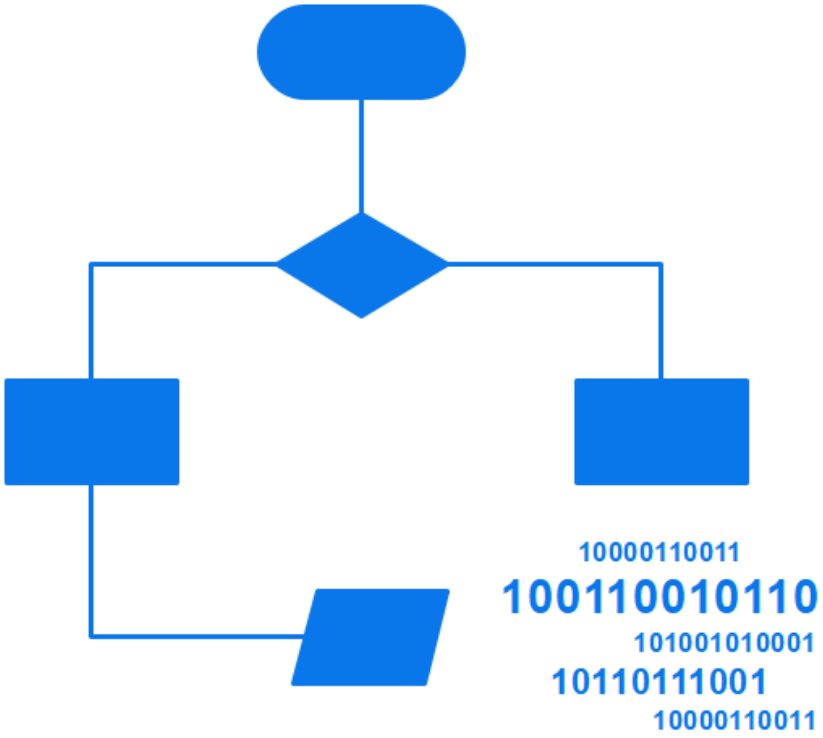
Algorithms and flowcharts are two different tools that are helpful for creating new programs, especially in computer programming. An algorithm is a step-by-step analysis of the process, while a flowchart explains the steps of a program in a graphical way.

Definition of Algorithm

Writing a logical step-by-step method to solve the problem is called the algorithm. In other words, an algorithm is a procedure for solving problems. In order to solve a mathematical or computer problem, this is the first step in the process.

An algorithm includes calculations, reasoning, and data processing. Algorithms can be presented by natural languages, pseudocode, and flowcharts, etc.



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Definition of Flowchart

A flowchart is the graphical or pictorial representation of an algorithm with the help of different symbols, shapes, and arrows to demonstrate a process or a program. With algorithms, we can easily understand a program. The main purpose of using a flowchart is to analyze different methods. Several standard symbols are applied in a flowchart:

Terminal Box - Start / End	
Input / Output	
Process / Instruction	
Decision	
Connector / Arrow	

Difference between Algorithm and Flowchart

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Algorithm	Flowchart
• It is a procedure for solving problems. • The process is shown in step-by-step instruction. • It is complex and difficult to understand. • It is convenient to debug errors. • The solution is showcased in natural language. • It is somewhat easier to solve complex problem. • It costs more time to create an algorithm.	• It is a graphic representation of a process. • The process is shown in block-by-block information diagram. • It is intuitive and easy to understand. • It is hard to debug errors. • The solution is showcased in pictorial format. • It is hard to solve complex problem. • It costs less time to create a flowchart.

Example 1: Print 1 to 20:

Algorithm:

- Step 1: Initialize X as 0,
- Step 2: Increment X by 1,
- Step 3: Print X,
- Step 4: If X is less than 20 then go back to step 2.

Flowchart:

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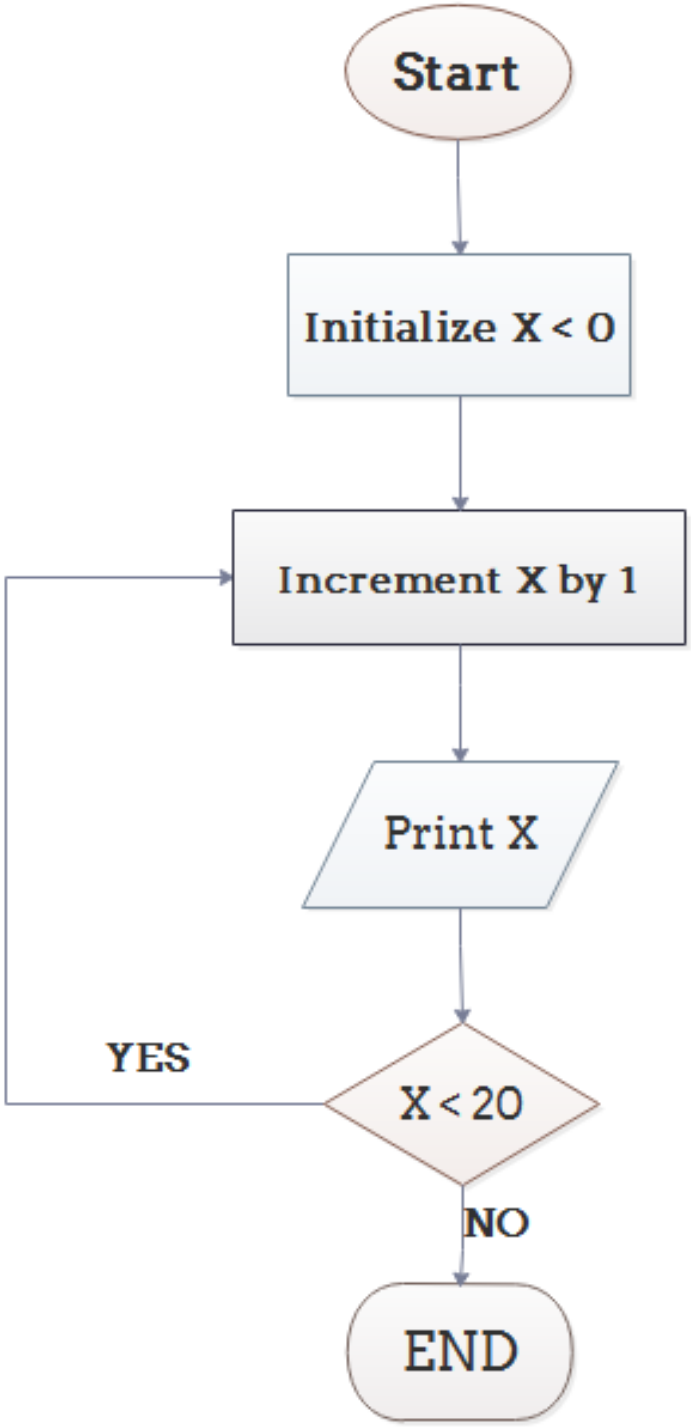

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Example 2: Convert Temperature from Fahrenheit (℉) to Celsius (℃)

Algorithm:

- Step 1: Read temperature in Fahrenheit,
- Step 2: Calculate temperature with formula C=5/9*(F-32),
- Step 3: Print C.

Flowchart :