

Flowchart

A flowchart is a diagram that depicts a process, system, or computer algorithm. They are widely used in multiple fields to document, study, plan, improve, and often communicate complex processes in clear, easy-to-understand diagrams.

Flowcharts for computer programming/algorithms

As a visual representation of data flow, flowcharts are useful in writing a program or algorithm and explaining it to others or collaborating with them on it. You can use an algorithm flowchart to spell out the logic behind a program before ever starting to code the automated process. It can help to organize big-picture thinking and provide a guide when it comes time to code. More specifically, flowcharts can:

- Demonstrate the way code is organized.

- Visualize the execution of code within a program.

- Show the structure of a website or application.

- Understand how users navigate a website or program.

Often, programmers may write pseudocode, a combination of natural language and computer language able to be read by people. This may allow greater detail than the flowchart and serve either as a replacement for the flowchart or as a next step to the actual code.

Related diagrams used in computer software include:

- Unified Modeling Language (UML): This is a general-purpose language used in software engineering for modeling.

- Nassi-Shneiderman Diagrams: Used for structured computer programming. Named after Isaac Nassi and Ben Shneiderman, who developed it in 1972 at SUNY-Stony Brook. Also called Structograms.

- DRAKON charts: DRAKON is an algorithmic visual programming language used to produce flowcharts.

- database flowchart

Problem Chart :

You are given the lengths of 3 sides of a valid triangle. You need to print any one of the following outputs depending on the triangle's nature.

Print 1, if the triangle is equilateral

Print 0, if it's isosceles

Print -1, if it's scalene

Draw a flowchart for this process.

You are given a single positive integer, N. You need to calculate and print the sum of all even numbers till N(inclusive)

Draw a flowchart for this process

You are given two numbers. You need to calculate and print their greatest common divisor (GCD).

Draw a flowchart for this process.

You are given a single positive integer, N. You need to find and print whether N is Prime or not.

Draw a flowchart for this process

You are given a single non-negative integer, N. You need to print all numbers that:

(i) occur in the range 0 to N (both inclusive)

(ii) are a part of the fibonacci sequence

Draw a flowchart for this process

Note 1: The first two terms of the fibonacci sequence are 0 and 1.

You are given a single non-negative integer, N. You need to find out whether N is a part of the fibonacci sequence.

Print "Yes" if it is and "No" if it's not.

Draw a flowchart for this process

Note 1: The first two terms of the fibonacci sequence are 0 and 1.