

Flowcharts



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The Visual representation of algorithm and Pseudo is known as flowchart

or

The Graphical representation of a Program flow and algorithm is known as flowchart. It helps to solve a problem efficiently. It also helps to check the Program flow after the Coding Part.

For the maintaining and testing of Software it acts as a good tool. In addition a flowchart is one that is created by the programmers that represent the sequence of steps involved in solving a problem graphically.

Flowchart is blueprint of the Software project which displays the design, general plan, and necessary facts of a planned system. In a programming sense a flowchart is a logical diagram. To compare the various approaches and alternatives on the paper it helps to the programmer.

Reasons for Drawing a Flowchart



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Flowchart can be drawing for the following reasons;

- 1) It provides an excellent visual representation of the structure of the program.
- 2) Flowchart is language independent so it is not only a document rather it is also used for the communication amongst various programmers.
- 3) It uses efficient and simple method to show the logical diagram of an algorithm so it is also used as useful reference.
- 4) Without coding programmer can test alternative solutions for a problem. It helps to the programmer to remove the logical errors before he/she write a code.
- 5) To solve a complex problem it provides an easy to understand structure for a computer program flowchart is necessary part in the documentation of that program.

VKSU Common Flowchart Symbols

Table Flowchart Symbols

Flowchart Symbol

<u>Name (alternates)</u>	<u>Description</u>
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Start/End :- These Symbols are the start and stop point in this process which represent start or end of the program by the text written inside the symbol.

Process : The symbol represents an operation or action step.

Alternate Process : It is an alternate to the normal process step.

Decision : It represents a question or branch in the process.

Input/output : It represents data inputs and outputs to add from a process.

Arrow (Flow lines) : The arrow is used to connect the symbols and shows the flow of the algorithm logic. It also connects the basic shapes

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in a flowchart. It shows the flow of a program from start to end. Generally flowcharts flow from the top to the bottom or flow from the left to the right.

Documents: This symbol represents the input or output of a document, specifically. Examples of input are receiving a report, email or order. Examples of an output using a document symbol include generating a presentation, memo, or letter.

On-page Connector: Usually used within more complex charts, this symbol connects separate elements across one page.

Off-Page Connector / Link Symbol: Frequently used within complex charts, this symbol connects separate elements across multiple pages with the page number usually placed on or within the shape for easy reference.

~~Hexagon~~ Hexagon (for Loop / Repetition Looping):

To represent a group of repetitive



Statements. It is used to create a preparation box containing the loop setting statement.

Module Call: A Program module is represented in a flowchart by rectangle with ~~some~~ some lines to distinguish it from Process Symbol. Often programmers will make a distinction between Program Control and specific task modules as shown below.

1.) Local Module:-

Usually a Program Control function.

2.) Library module:-

Usually a specific task function.

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