Flowchart and Algorithms in C Language

Algorithm:

Algorithm is a step by step representation of program. These steps or procedures helps in solving the problem. Algorithm is set of rules that are followed to solve problem. These rules or steps helps to define how the work is to be executed to get desired output or result.

Steps in an Algorithm:

1. Start
2. Input
3. Process
4. Output
5. End

For Example,

If you want to perform addition of two integers, then we can write an algorithm as follows,

Step 1: start

Step 2: Input two integers

Step 3: Compute sum=a+b

Step 4: Print sum

Step 5: Stop

Another example to get average marks of three subjects

Step 1: Start

Step 2: Input three subject's marks

Step 3: Compute average=s1+s2+s3/3

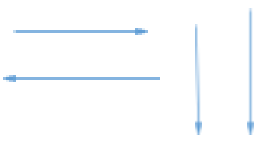
Step4: Print average

Step5: Stop

Flowchart:

Pictorial or diagrammatic representation of an algorithm is called flowchart. It is a graphical representation of an algorithm. Programmers can use it as a program planning tool to solve a problem. In flowchart the symbols are used to indicate the flow of information and processes.

Symbols used in flowchart:

Name	Symbol	Purpose
Terminal	 Oval	Start/Stop/Begin/End: The flowchart process start and end with terminal symbol.
Input/Output	 Parallelogram	Input/Output of Data: User inputs and result display process done with input output symbol
Process	 Rectangle	Any processing to be performed with process symbol
Decision Box	 Dimond	Decision operation that determines which path has to be followed
Connector	 Connector	Used to connect different paths of flowchart
Flow	 Arrows	Used to join two symbols and also used to represent flow of execution

Following example shows the flowchart to display addition of two integers