

00 – Flowchart Arabic

Download Flowgorithm program :

<http://www.flowgorithm.org/download/>

Online tool for creating flowchart :

[/https://www.101computing.net/flowchart](https://www.101computing.net/flowchart)

Join the course using the link :

<http://www.acadox.com/class/59626>

Computational problem :

A problem that can be solved step-by-step with a computer (i.e., Problems that can be solved by following a sequence of computational steps .

Note : this sequence of steps/instructions are called **Algorithm** .

algorithm: a set of steps that defines how a task is performed .

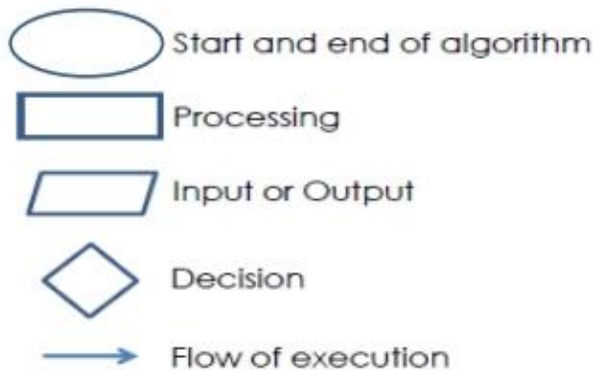
Programming: is the process of converting an algorithm into a program using one of the programming languages .

Problem Solving is the **core of** computer science .

Methods of Representing An Algorithm

Flowchart

Specifies the steps of an algorithm using a traditional **graphical tool with standardized symbols**.



Pseudocode

Specifies the steps of algorithm using essentially **English Text with programming concepts**

e.g.,

PSEUDOCODE

```
set total to zero
get list of numbers
loop through each number in the list
  add each number to total
end loop
if number more than zero
  print "it's positive" message
else
  print "it's zero or less" message
end if
```

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Difference between Pseudo Code & Flowchart

Flowchart	Pseudo Code
Flowchart contains standard symbols to represent different computer operations.	There is no standard for writing pseudo code.
Flowchart is less frequently used as it takes more time to design.	Pseudo code is more frequently used as it takes less time.
It is difficult to modify.	It is easier to modify.
It is a graphical representation of solution.	It is not a graphical representation of solution.