# Sequential Structure Algorithms

Sequence structures are used when instructions are to be carried out in a particular order.

Example: Instruction 1 Instruction 2 etc.

**Example:** Write an algorithm to read a number, find its square and print the square of a number.

**Steps to the solution:**

- Identify Input (number)
- Identify Process (calculating the square)
- Identify Output (print the square of the number)

| Basic Mathematical Operators | | | |
|---|---|---|---|
| **Operator** | **Symbol** | **Operator** | **Symbol** |
| Addition | + | Multiplication | * |
| Subtraction | - | Division | / |

**Representing the solution as a Pseudocode Algorithm:**

**NB.**

**Pseudocode: A language consisting of English-like statements that is used to describe the steps to the solution of a problem. Pseudocode is NOT a programming language.**

```
Begin
   Print "Enter a Number"
   Read num
   sq = num * num
   Print "The Square is", sq
End
```

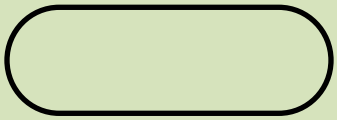
**Representing the solution as a Flowchart**:

**NB.**

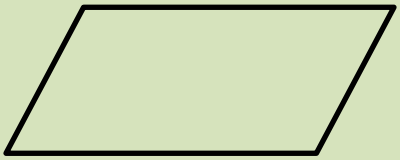
**Flowchart: A pictorial representation of the solution to a problem.**

**Flowcharting Symbols**

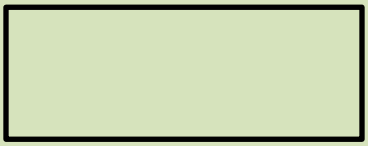
**Terminator or Start/Stop**



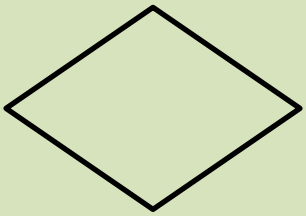
**Input or Output**



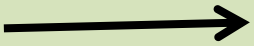
**Process Box**



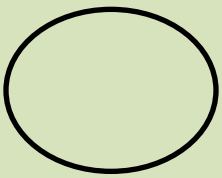
**Decision**



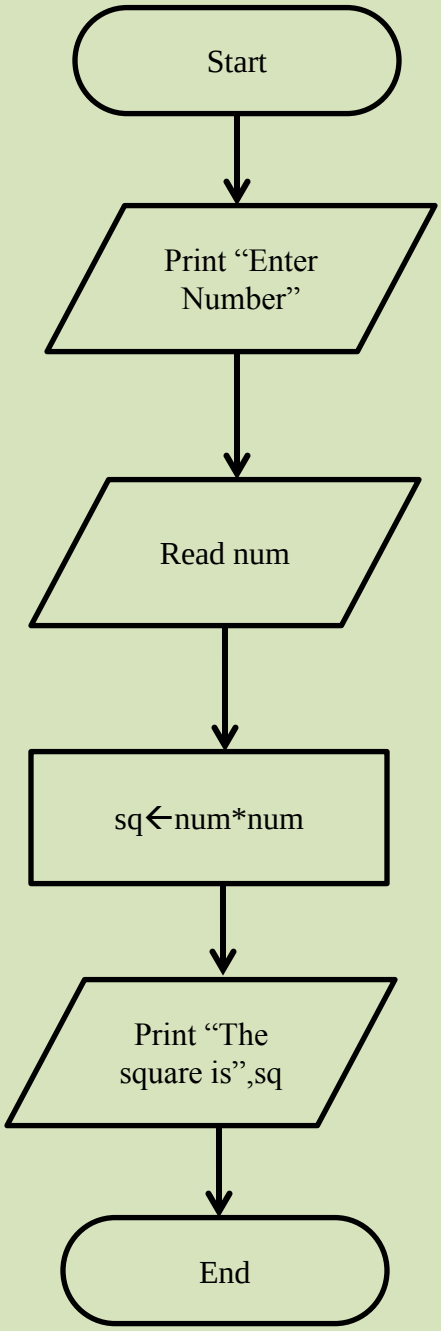
**Flow of Control (Arrow)**



**Connector**



**Flowchart Solution**


Start
Print “Enter Number”
Read num
sq←num*num
Print “The square is”,sq
End