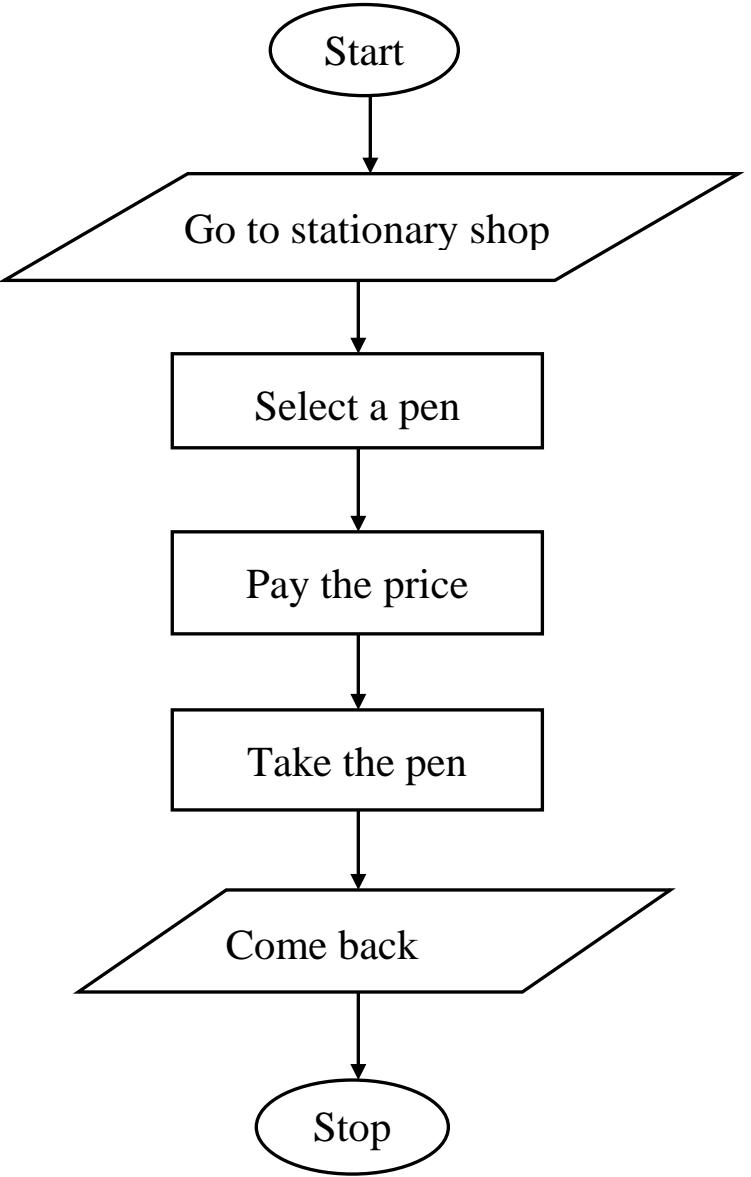


# Algorithm and Flowchart Examples

## 1. Write algorithm and draw flowchart to “Buy a Pen”

Algorithm	Flowchart
<p><b>Step1.</b> Start.</p> <p><b>Step2.</b> Go to stationary shop</p> <p><b>Step3.</b> Select a pen</p> <p><b>Step4.</b> Pay the price</p> <p><b>Step5.</b> Take the pen</p> <p><b>Step6.</b> Come back home</p> <p><b>Step7.</b> Stop</p>	 <pre>graph TD; Start((Start)) --&gt; Go[/Go to stationary shop/]; Go --&gt; Select[Select a pen]; Select --&gt; Pay[Pay the price]; Pay --&gt; Take[Take the pen]; Take --&gt; ComeBack[/Come back/]; ComeBack --&gt; Stop((Stop));</pre> The flowchart consists of the following steps: 1. An oval labeled "Start" at the top. 2. A parallelogram labeled "Go to stationary shop". 3. A rectangle labeled "Select a pen". 4. A rectangle labeled "Pay the price". 5. A rectangle labeled "Take the pen". 6. A parallelogram labeled "Come back". 7. An oval labeled "Stop" at the bottom. Arrows connect the "Start" oval to the "Go to stationary shop" parallelogram, the "Go to stationary shop" parallelogram to the "Select a pen" rectangle, the "Select a pen" rectangle to the "Pay the price" rectangle, the "Pay the price" rectangle to the "Take the pen" rectangle, the "Take the pen" rectangle to the "Come back" parallelogram, and the "Come back" parallelogram to the "Stop" oval.

**2. Write algorithm and draw flowchart to “Add two Numbers”.**

Algorithm	Flowchart
<p><b>Step1.</b> Start.</p> <p><b>Step2.</b> Take the two numbers.</p> <p><b>Step3.</b> Add them.</p> <p><b>Step4.</b> Give the result.</p> <p><b>Step5.</b> Stop</p>	<pre>graph TD; Start([Start]) --&gt; Input[/Take two numbers A and B/]; Input --&gt; Process[Find Sum A + B]; Process --&gt; Output[/Give the Result/]; Output --&gt; Stop([Stop]);</pre>

### 3. Write algorithm and draw flowchart to “Find the Area of a Rectangle”

Algorithm	Flowchart
<p><b>Step1.</b> Start.</p> <p><b>Step2.</b> Take the length (l) and breadth (b)</p> <p><b>Step3.</b> Find the Area as <math>l \times b</math></p> <p><b>Step4.</b> Give the result.</p> <p><b>Step5.</b> Stop</p>	<pre>graph TD; Start([Start]) --&gt; Input[/Take the length (l) and breadth (b)/]; Input --&gt; Process[Find the Area as l x b]; Process --&gt; Output[/Give the Result/]; Output --&gt; Stop([Stop]);</pre> The flowchart consists of five main components connected by arrows: 1. An oval labeled "Start" at the top. 2. A parallelogram labeled "Take the length (l) and breadth (b)" below it. 3. A rectangle labeled "Find the Area as $l \times b$ " in the center. 4. A parallelogram labeled "Give the Result" below the central rectangle. 5. An oval labeled "Stop" at the bottom. Arrows indicate a sequential flow from Start to Input, Input to Process, Process to Output, and Output to Stop.

#### 4. Write algorithm and draw flowchart to “Display your Age”

Algorithm	Flowchart
<p><b>Step1.</b> Start.</p> <p><b>Step2.</b> Input your age</p> <p><b>Step3.</b> Display your age</p> <p><b>Step4.</b> Stop</p>	<pre>graph TD; Start([Start]) --&gt; Input[/Input Age/]; Input --&gt; Display[/Display Age/]; Display --&gt; Stop([Stop]);</pre> The flowchart consists of four main components: a start oval at the top, followed by a parallelogram labeled "Input Age", then another parallelogram labeled "Display Age", and finally a stop oval at the bottom. Arrows connect the start oval to the input parallelogram, the input parallelogram to the display parallelogram, and the display parallelogram to the stop oval.

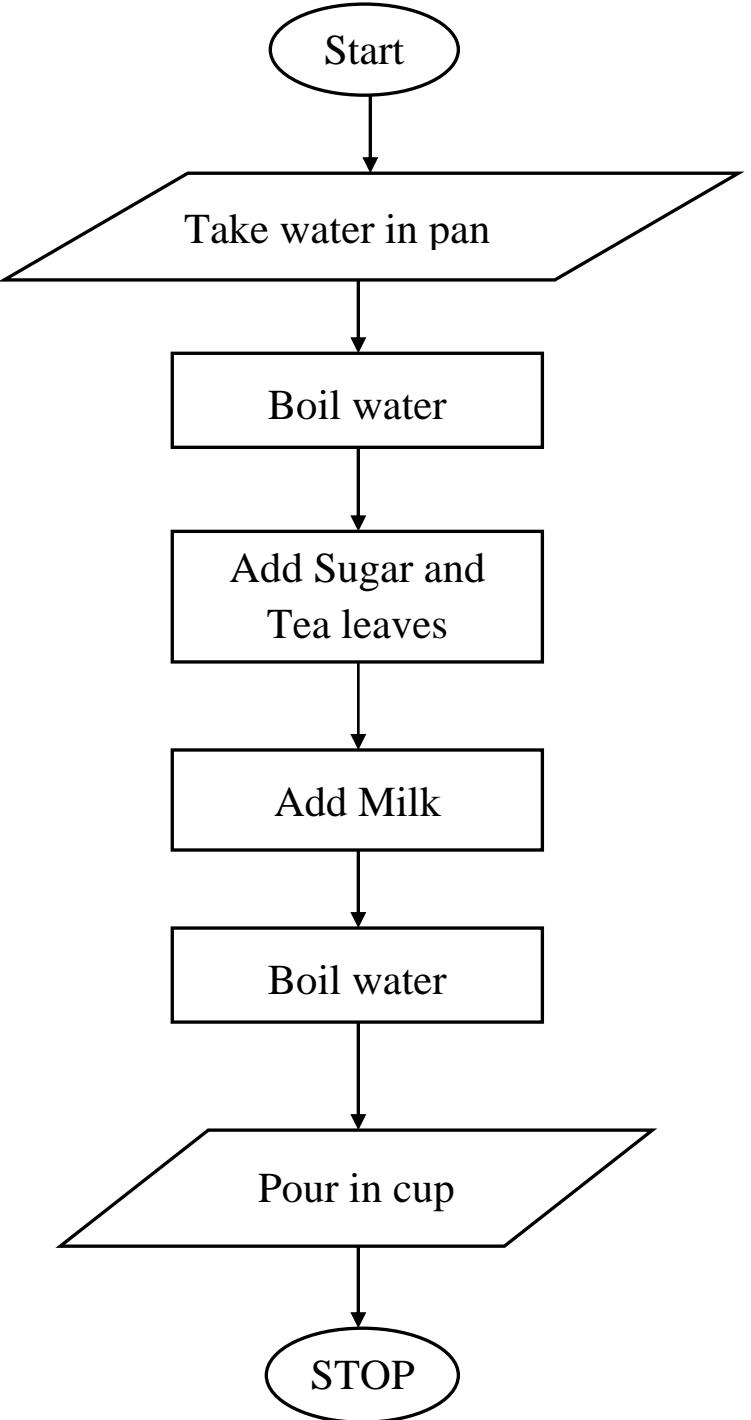
## 5. Write algorithm and draw flowchart to “Find the Greater of two Numbers”

Algorithm	Flowchart
<p><b>Step1.</b> Start.</p> <p><b>Step2.</b> Input the two numbers A and B.</p> <p><b>Step3.</b> Check if <math>A &gt; B</math>. If yes, go to step 4 else go to step 6</p> <p><b>Step4.</b> Display the number A</p> <p><b>Step5.</b> Go to step 7</p> <p><b>Step6.</b> Display the number B</p> <p><b>Step7.</b> Stop</p>	<pre> graph TD     Start([Start]) --&gt; Input[/Input A and B/]     Input --&gt; Decision{Is A &gt; B}     Decision -- NO --&gt; DisplayB[/Display B/]     Decision -- YES --&gt; DisplayA[/Display A/]     DisplayB --&gt; STOP([STOP])     DisplayA --&gt; STOP   </pre>

## 6. Write algorithm and draw flowchart to “Find the Square of a Number”

Algorithm	Flowchart
<p><b>Step1.</b> Start.</p> <p><b>Step2.</b> Input the Number A</p> <p><b>Step3.</b> Let Square = A*A</p> <p><b>Step4.</b> Give the answer</p> <p><b>Step5.</b> Stop</p>	<pre>graph TD; Start([Start]) --&gt; Input[/Input A/]; Input --&gt; Process[Square = A*A]; Process --&gt; Output[/Give Answer/]; Output --&gt; Stop([STOP]);</pre>

## 7. Write algorithm and draw flowchart to “Make Tea”

Algorithm	Flowchart
<p><b>Step1.</b> Start.</p> <p><b>Step2.</b> Take water in pan</p> <p><b>Step3.</b> Boil the water</p> <p><b>Step4.</b> Add sugar and Tea leaves</p> <p><b>Step5.</b> Add milk</p> <p><b>Step6.</b> Boil it</p> <p><b>Step7.</b> Pour it into cup</p> <p><b>Step8.</b> Stop</p>	 <pre>graph TD; Start([Start]) --&gt; Take[/Take water in pan/]; Take --&gt; Boil1[Boil water]; Boil1 --&gt; Add1[Add Sugar and Tea leaves]; Add1 --&gt; Add2[Add Milk]; Add2 --&gt; Boil2[Boil water]; Boil2 --&gt; Pour[/Pour in cup/]; Pour --&gt; STOP([STOP]);</pre> The flowchart illustrates the steps to make tea. It begins with an oval labeled "Start". An arrow leads from "Start" to a parallelogram labeled "Take water in pan". From there, an arrow points down to a rectangle labeled "Boil water". Another arrow leads from "Boil water" to a rectangle labeled "Add Sugar and Tea leaves". A third arrow leads from "Add Sugar and Tea leaves" to a rectangle labeled "Add Milk". A fourth arrow leads from "Add Milk" to a rectangle labeled "Boil water". A fifth arrow leads from "Boil water" to a parallelogram labeled "Pour in cup". Finally, an arrow leads from "Pour in cup" to an oval labeled "STOP".