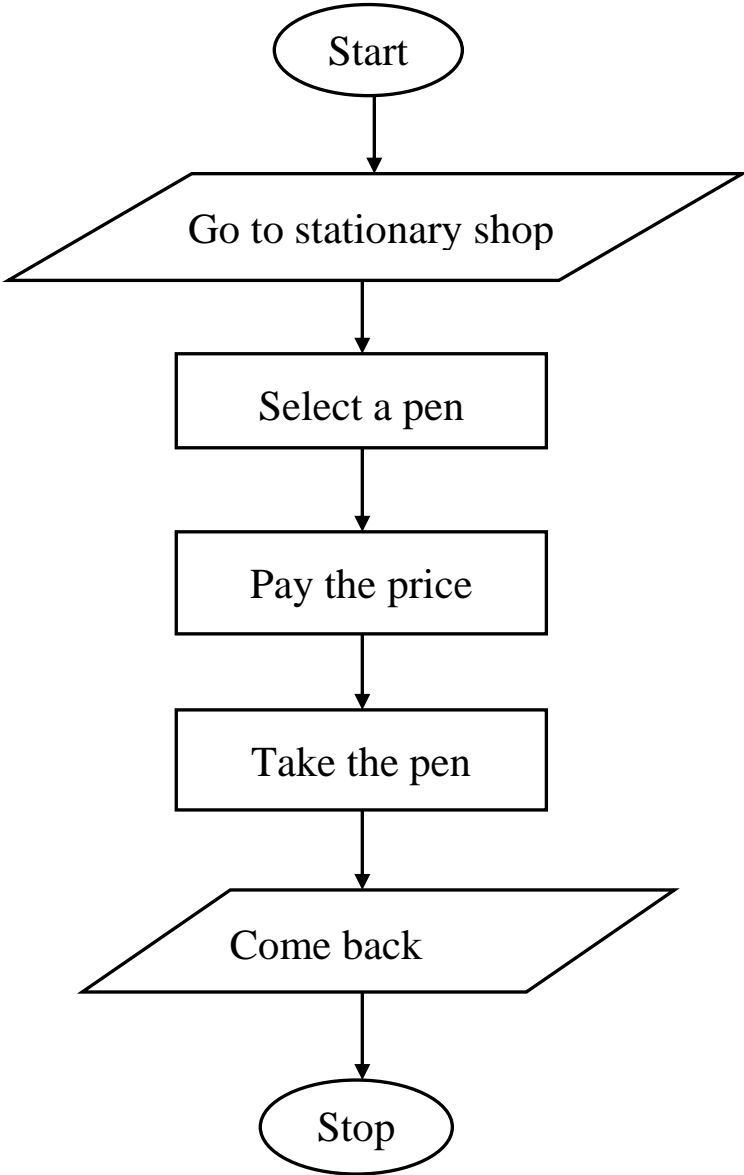
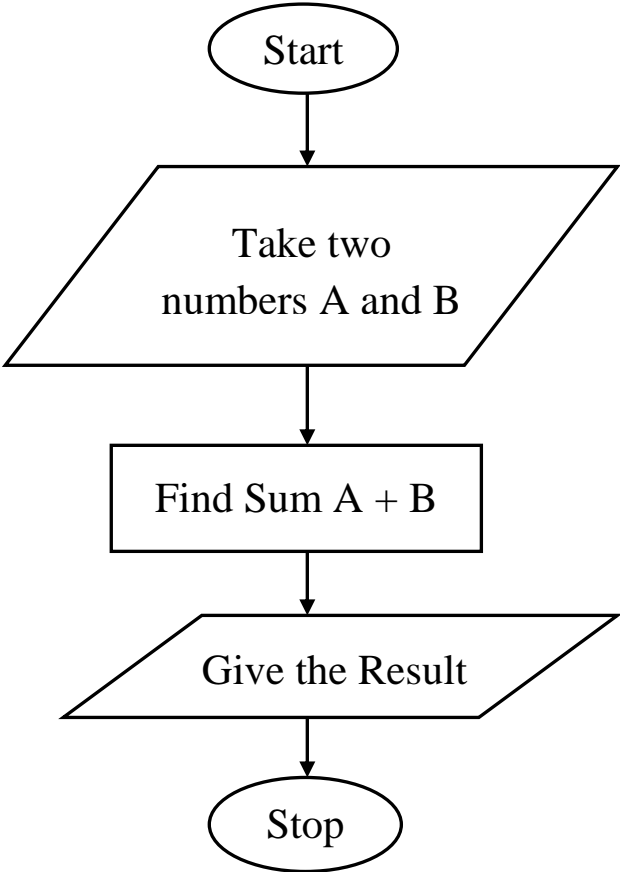


# Algorithm and Flowchart Examples

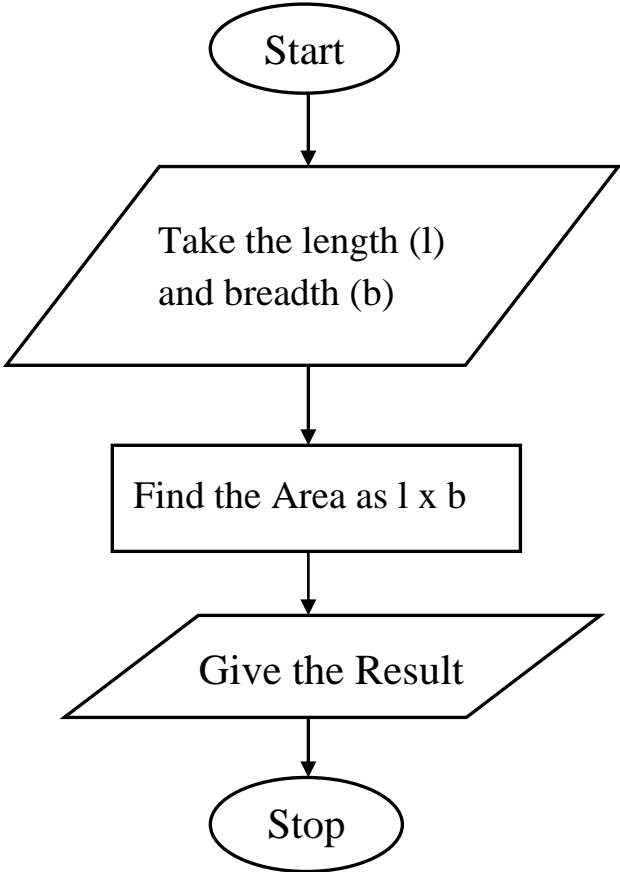
## 1. Write algorithm and draw flowchart to “Buy a Pen”

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; GoToShop[/Go to stationary shop/]; GoToShop --&gt; SelectPen[Select a pen]; SelectPen --&gt; PayPrice[Pay the price]; PayPrice --&gt; TakePen[Take the pen]; TakePen --&gt; ComeBack[/Come back/]; ComeBack --&gt; Stop([Stop]);</pre> <p>The flowchart illustrates the process of buying a pen. It begins with an oval 'Start' terminal, followed by a parallelogram 'Go to stationary shop' input/output. The process continues with three rectangular action boxes: 'Select a pen', 'Pay the price', and 'Take the pen'. This is followed by a parallelogram 'Come back' input/output, and finally an oval 'Stop' terminal. Arrows indicate the sequential flow from top to bottom.</p>

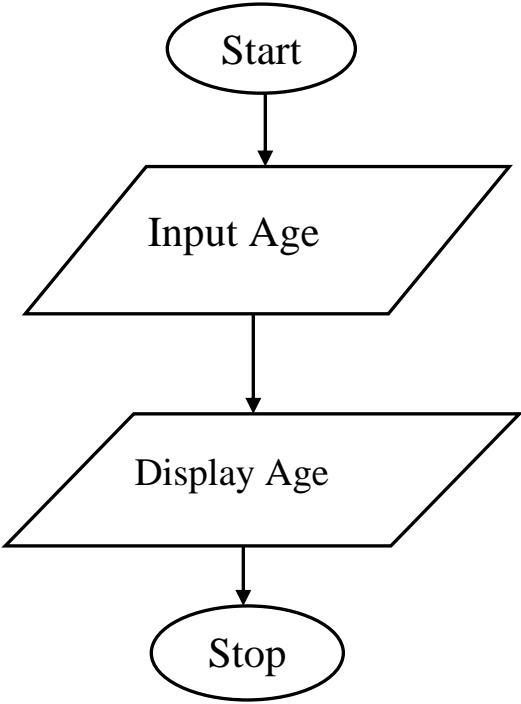
## 2. Write algorithm and draw flowchart to “Add two Numbers”.

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> <p>The flowchart illustrates the process of adding two numbers. It begins with an oval 'Start' terminal, followed by a parallelogram input block 'Take two numbers A and B'. This leads to a rectangular process block 'Find Sum A + B', which then connects to a parallelogram output block 'Give the Result'. Finally, the flowchart ends at an oval 'Stop' terminal. All steps are connected by downward-pointing arrows.</p>

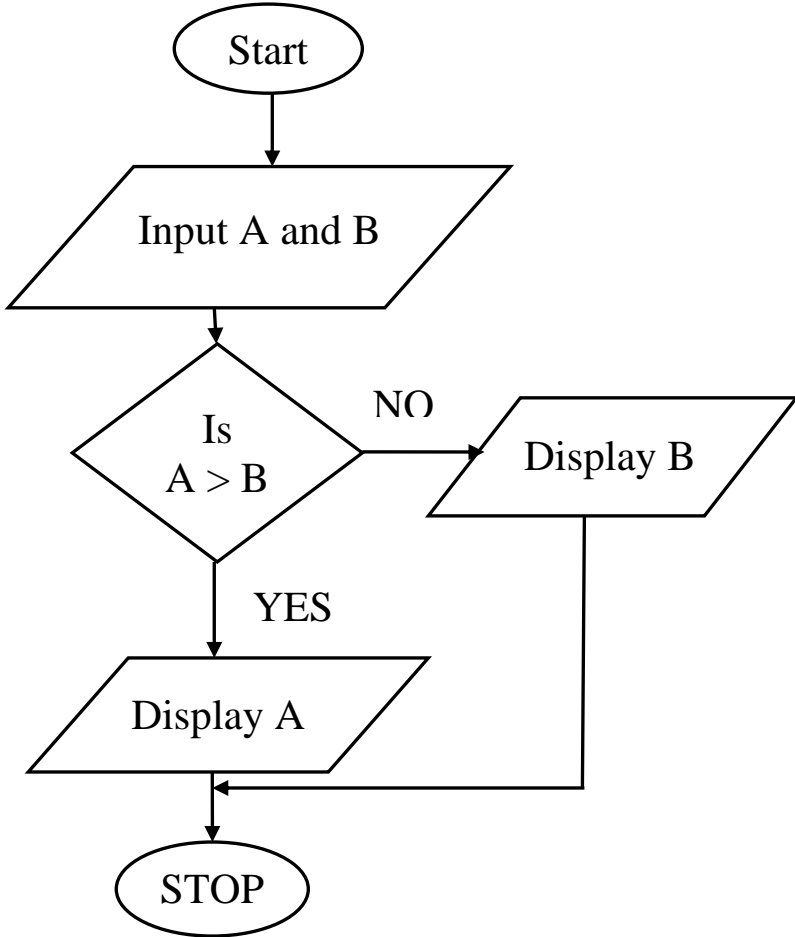
### 3. Write algorithm and draw flowchart to “Find the Area of a Rectangle”

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> <p>The flowchart illustrates the process of finding the area of a rectangle. It begins with an oval 'Start' terminal, followed by a parallelogram input block 'Take the length (l) and breadth (b)'. This leads to a rectangular process block 'Find the Area as l x b', which then connects to a parallelogram output block 'Give the Result'. Finally, the flowchart ends at an oval 'Stop' terminal. All steps are connected by downward-pointing arrows.</p>

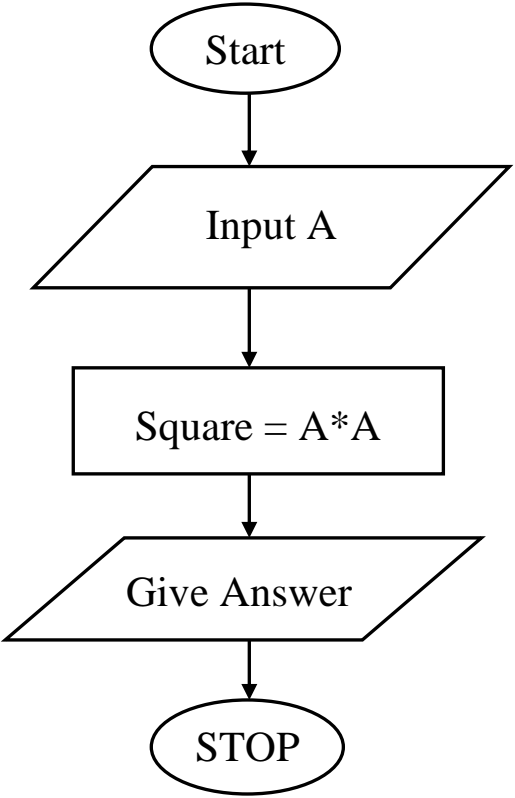
#### 4. Write algorithm and draw flowchart to “Display your Age”

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> <p>The flowchart illustrates the process of displaying age. It begins with an oval 'Start' terminal, followed by a parallelogram 'Input Age' input process, then another parallelogram 'Display Age' output process, and finally an oval 'Stop' terminal. Arrows connect these steps in a linear sequence from top to bottom.</p>

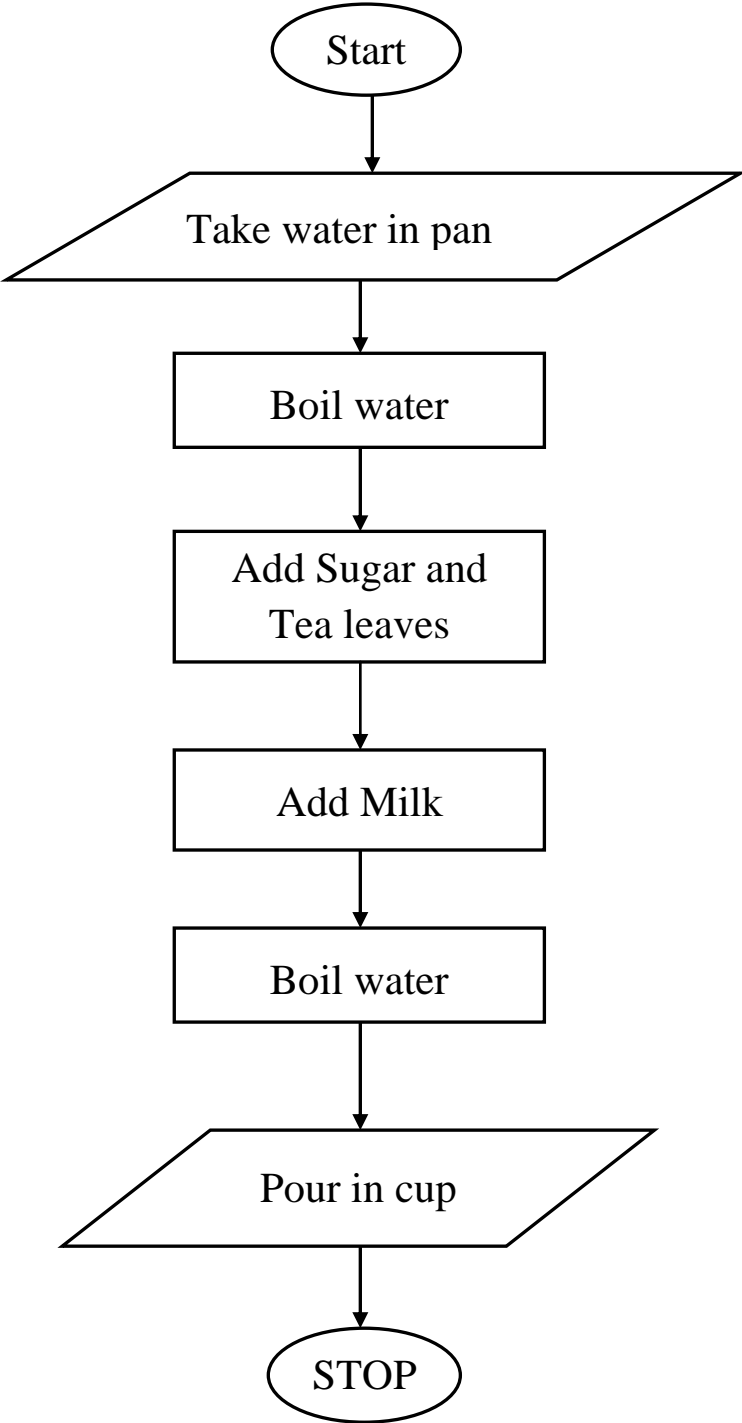
**5. Write algorithm and draw flowchart to “Find the Greater of two Numbers”**

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 -- YES --&gt; DisplayA[/Display A/]; Decision -- NO --&gt; DisplayB[/Display B/]; DisplayA --&gt; Stop([STOP]); DisplayB --&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; TakeWater[/Take water in pan/]; TakeWater --&gt; BoilWater1[Boil water]; BoilWater1 --&gt; AddSugar[Add Sugar and Tea leaves]; AddSugar --&gt; AddMilk[Add Milk]; AddMilk --&gt; BoilWater2[Boil water]; BoilWater2 --&gt; PourCup[/Pour in cup/]; PourCup --&gt; Stop([STOP]);</pre> <p>The flowchart illustrates the process of making tea. It begins with an oval 'Start' terminal, followed by a parallelogram input/output box 'Take water in pan'. This is followed by a sequence of rectangular process boxes: 'Boil water', 'Add Sugar and Tea leaves', 'Add Milk', and another 'Boil water'. The next step is a parallelogram output box 'Pour in cup', which leads to an oval 'STOP' terminal. Arrows indicate the downward flow from one step to the next.</p>