

## Futoshiki – Getting started

Did you figure out all or some of these rules from the solved puzzle?

- Every row and every column must contain the digits 1, 2, 3, 4, once each.
- The numbers directly on either side of an inequality must satisfy the greater than and less than signs. Examples:  $4 > 2$ ,  $4 > 3 > 1$ ,  $2 < 3$ ,  $1 < 2 < 4$ .

Here is one sequence of steps leading towards the solution.

<div style="text-align: center;"> <div><input type="text"/></div> &lt; <div style="color: red;">3</div> <div><input type="text"/></div> <div><input type="text"/></div>  <div><input type="text"/></div> &gt; <div><input type="text"/></div> <div><input type="text"/></div> &lt; <div style="color: red;">4</div>  <div><input type="text"/></div> <div><input type="text"/></div> <div>∨</div> <div><input type="text"/></div> <div><input type="text"/></div>  <div style="color: red;">3</div> <div><input type="text"/></div> <div><input type="text"/></div> <div><input type="text"/></div> </div>	<div style="text-align: center;"> <div style="color: green;">12</div> &lt; <div><input type="text"/></div> <div style="color: purple;">4</div> <div><input type="text"/></div>  <div><input type="text"/></div> &gt; <div><input type="text"/></div> <div style="color: blue;">23</div> &lt; <div><input type="text"/></div> <div style="color: red;">4</div>  <div><input type="text"/></div> <div><input type="text"/></div> <div>∨</div> <div style="color: blue;">12</div> <div><input type="text"/></div>  <div><input type="text"/></div> <div><input type="text"/></div> <div style="color: red;">3</div> <div><input type="text"/></div> <div><input type="text"/></div> <div><input type="text"/></div> </div>
given clues	only 1 or 2 are less than 3
	look for long chains: these are the only possible numbers here
	this is the only place in row 1 for the 4
<div style="text-align: center;"> <div style="color: blue;">1</div> &lt; <div><input type="text"/></div> <div><input type="text"/></div> <div><input type="text"/></div> <div><input type="text"/></div>  <div style="color: green;">2</div> &gt; <div style="color: blue;">1</div> <div style="color: purple;">3</div> &lt; <div><input type="text"/></div> <div><input type="text"/></div>  <div><input type="text"/></div> <div><input type="text"/></div> <div>∨</div> <div>12</div> <div><input type="text"/></div> <div><input type="text"/></div>  <div><input type="text"/></div> <div><input type="text"/></div> <div style="color: red;">3</div> <div><input type="text"/></div> <div><input type="text"/></div> <div><input type="text"/></div> </div>	<div style="text-align: center;"> <div><input type="text"/></div> &lt; <div><input type="text"/></div> <div><input type="text"/></div> <div><input type="text"/></div> <div><input type="text"/></div>  <div><input type="text"/></div> &gt; <div><input type="text"/></div> <div><input type="text"/></div> &lt; <div><input type="text"/></div> <div><input type="text"/></div>  <div><input type="text"/></div> <div><input type="text"/></div> <div>∨</div> <div><input type="text"/></div> <div><input type="text"/></div> <div><input type="text"/></div>  <div><input type="text"/></div> <div><input type="text"/></div> <div style="color: red;">3</div> <div><input type="text"/></div> <div><input type="text"/></div> <div><input type="text"/></div> </div>
2 is the only number that can go here	now you finish it!
so the only possibility here is 1	
so we know that it must be the 3 here	