<p>There is an minefield of size <strong>MxN</strong>, <strong>S </strong>denotes &quot;Safe&quot; and <strong>M</strong> denotes &quot;Mine&quot;.</p>

<p><strong>Function Description</strong></p>

<p>Find the shortest path from the initial position to final position.</p>

<p><strong>Input Format</strong></p>

<p>The first line of input describes the number of rows, <strong>M</strong>.</p>

<p>The second line of input describes the number of columns, <strong>N</strong>.</p>

<p>The third line of input will provide the starting position of the field, [0,<strong>M</strong>-1] [0,<strong>N</strong>-1].</p>

<p>The fourth line of input will provide the ending position of the field, [0,<strong>M</strong>-1] [0,<strong>N</strong>-1].</p>

<p>The next <strong>N </strong>lines of input will provide elements of each row.</p>

<p><strong>Constraints</strong></p>

<p>1&lt;=<strong>M,N</strong>&lt;=50</p>

<p><strong>Output Format</strong></p>

<p>Display &quot;Shortest Path is&quot; and then the answer. If there is no path to the variable then <strong>STUDOUT </strong>should be &quot;Shortest Path doesn&#39;t exist&quot;.</p>

<p><strong>Sample Input</strong></p>

<pre>

<code>3

3

2 1

0 2

M M S

M M S

M S S</code></pre>

<p><strong>Sample Output</strong></p>

<pre>

<code>Shortest Path is 3</code></pre>

<p><strong>Explanation</strong></p>

<p>The shortest path to (0,2) from (2,1) goes through <strong>(2,2)</strong> then<strong> (1,2)</strong> and then finally<strong> (0,2) </strong>, hence the Shortest Path is 3.</p>