

Selenium WebDriver

XPATH-Axes
How? When?

The Golden Rule

What

What is Xpath-Axes?

XML path based on relationship

When

When to use?

Not able to locate unique WebElement using Basic xpath.

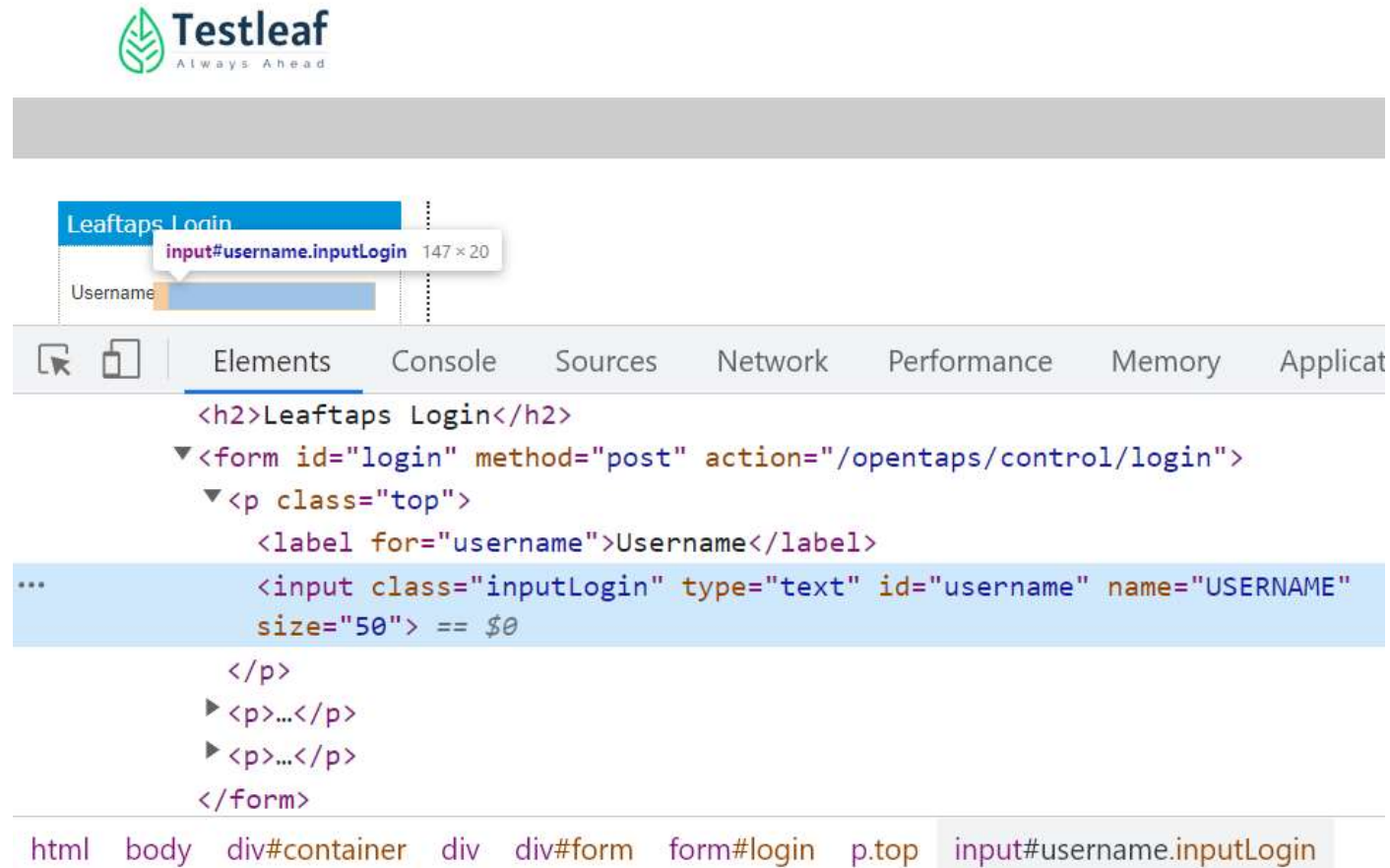
How

How to write xpath?

In relation with other elements

Xpath (RelationShip based)

LeafTaps- Login page



The screenshot shows the LeafTaps login page. At the top is the Testleaf logo with the tagline "Always Ahead". Below it is a grey header bar. The main content area contains a "Leaftaps Login" section. A tooltip points to the username input field with the text "input#username.inputLogin" and dimensions "147 x 20". The Chrome DevTools "Elements" panel is open, showing the following HTML structure:

```
<h2>Leaftaps Login</h2>
<form id="login" method="post" action="/opentaps/control/login">
  <p class="top">
    <label for="username">Username</label>
    ...
    <input class="inputLogin" type="text" id="username" name="USERNAME"
      size="50"> == $0
  </p>
  <p>...</p>
  <p>...</p>
</form>
```

The breadcrumb at the bottom of the Elements panel shows the path: `html > body > div#container > div > div#form > form#login > p.top > input#username.inputLogin`.

Xpath-Axes (type 1 of 8)

Parent To child :

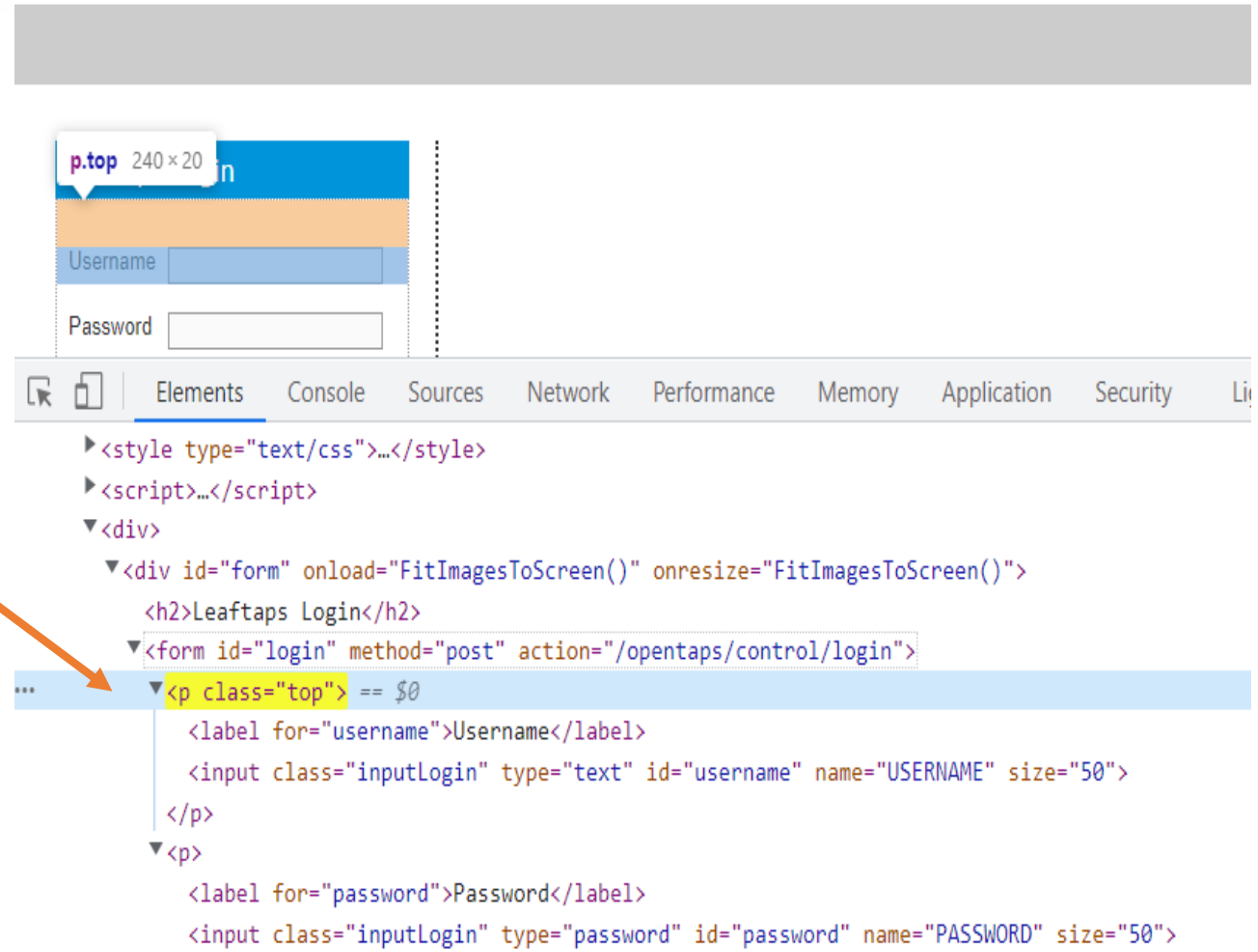
To reach the WebElement from **<form>**(parent tag) to **<p>** (child)

Syntax:

(parent realtive xpath)//(tagName of child)

Example:

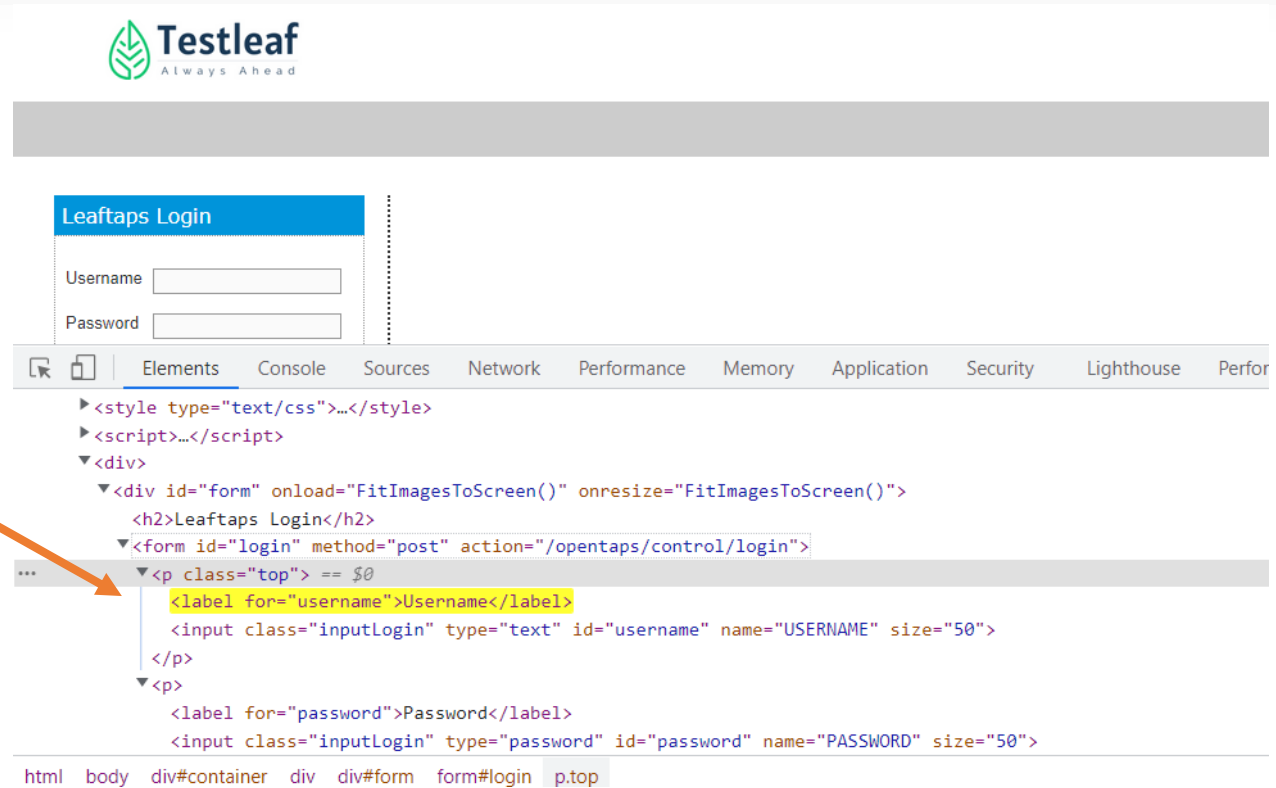
`//form[@id='login']/p`



Xpath-Axes (type 2 of 8)

GrandParent to child Relation :

To reach the WebElement from
<form>(grandparent tag) to
<label> (grand-child)



Syntax:

GrandParent relative xpath//tagName of grand child

Example:

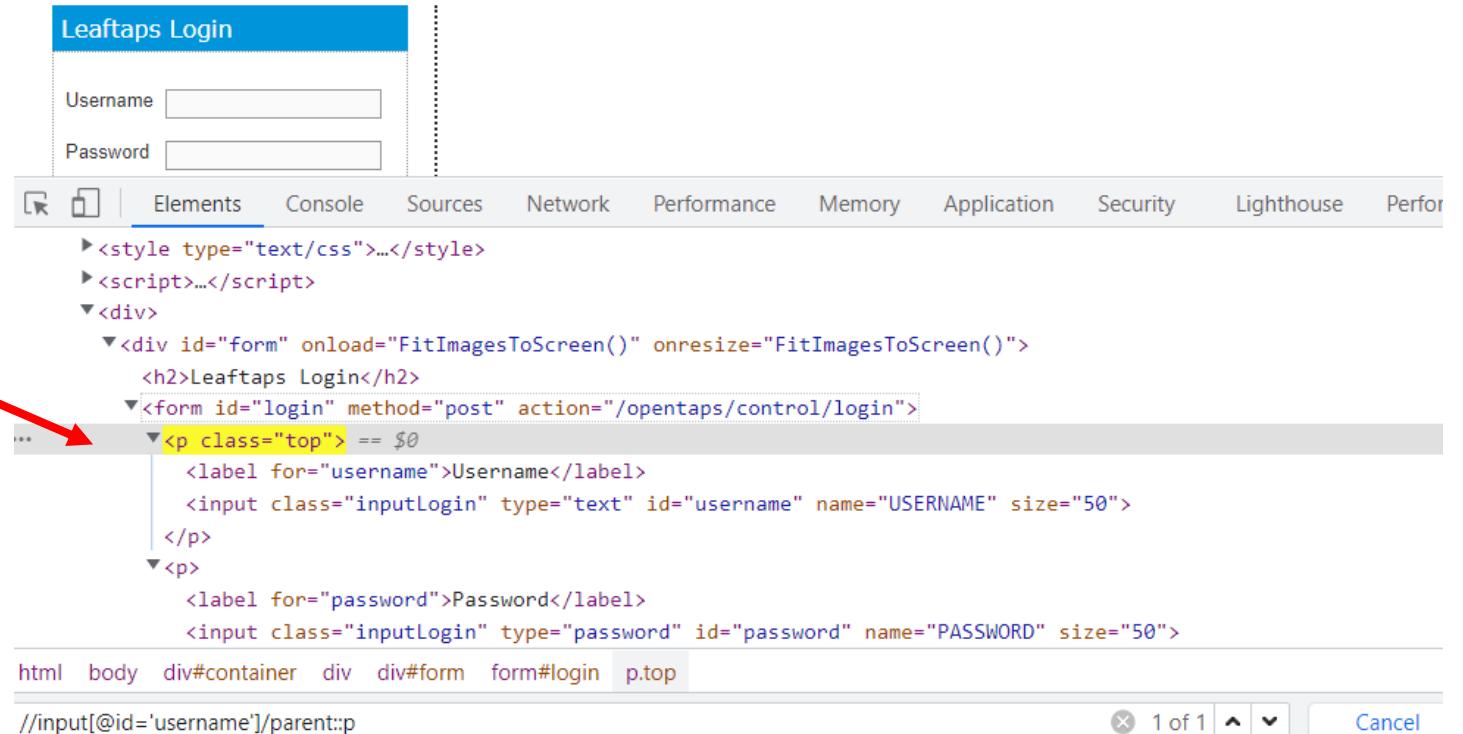
(//form[@id='login']//label)

Contd..

Xpath-Axes (type 3 of 8)

Child to parent :

To reach the WebElement from **<p>(child)**
to **<form> (parent)**



Syntax:

Child relative xpath/parent::parent tagName

Example

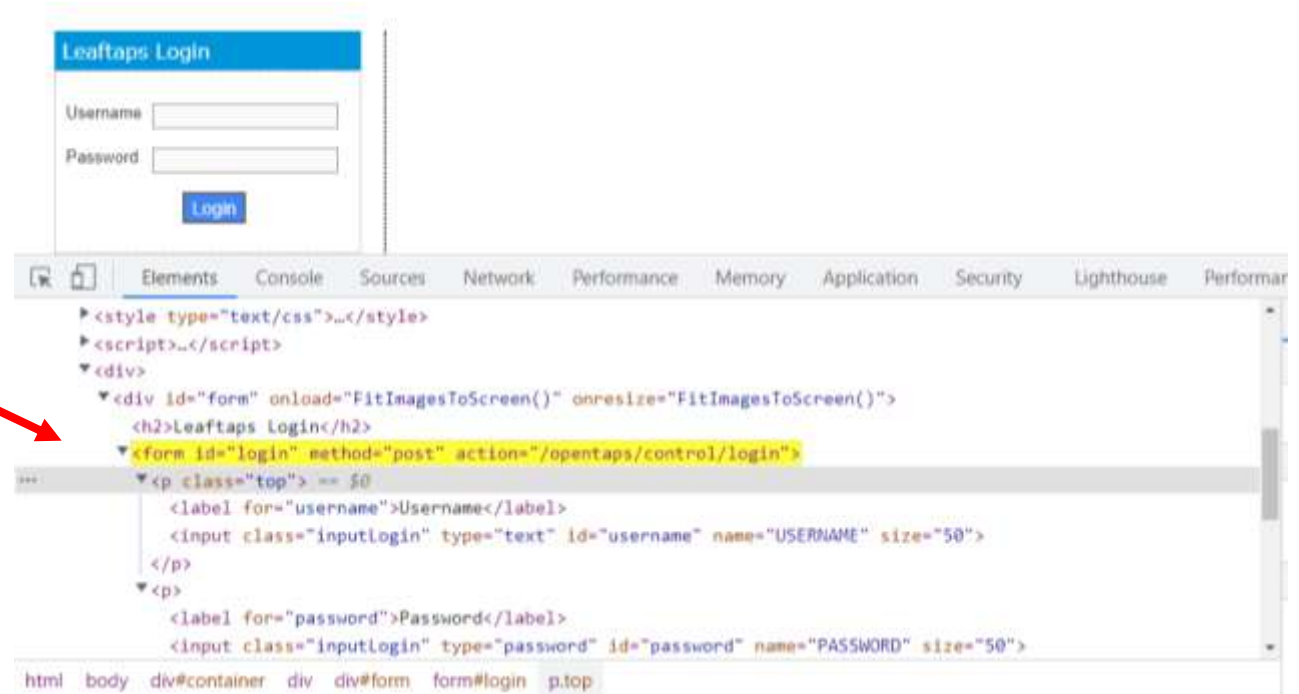
//input[@id='username']/parent::p

Contd..

Xpath-Axes(type 4 of 8)

GrandChild to Grand parent :

To reach the WebElement from <label>(grand-child) to <form> (grand-parent) , we have the keyword **ancestor**



Syntax:

GrandChild relative xpath/ancestor::tagName of grand parent

Example:

//input[@id='password']/ancestor::form

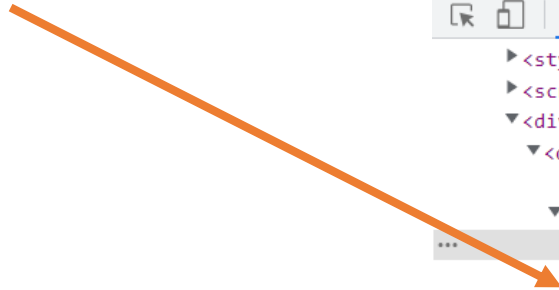
Contd..

Xpath-Axes(type 5 of 8)

Elder Sibling to Younger Sibling :

To reach the WebElement from <label> (child) to <label> (child) of same parent..

_ we have the keyword
following-sibling (finding from top to bottom)



```
<style type="text/css">...</style>
<script>...</script>
<div>
  <div id="form" onload="FitImagesToScreen()" onresize="FitImagesToScreen()">
    <h2>Leaftaps Login</h2>
    <form id="login" method="post" action="/opentaps/control/login">
      <p class="top"> == $0
        <label for="username">Username</label>
        <input class="inputLogin" type="text" id="username" name="USERNAME" size="50">
      </p>
      <p>
        <label for="password">Password</label>
        <input class="inputLogin" type="password" id="password" name="PASSWORD" size="50">
      </p>
    </form>
  </div>
</div>
```

html body div#container div div#form form#login p.top

Syntax:

(Elder sibling relative xpath)/following-sibling::tagName of younger sibling

Example:

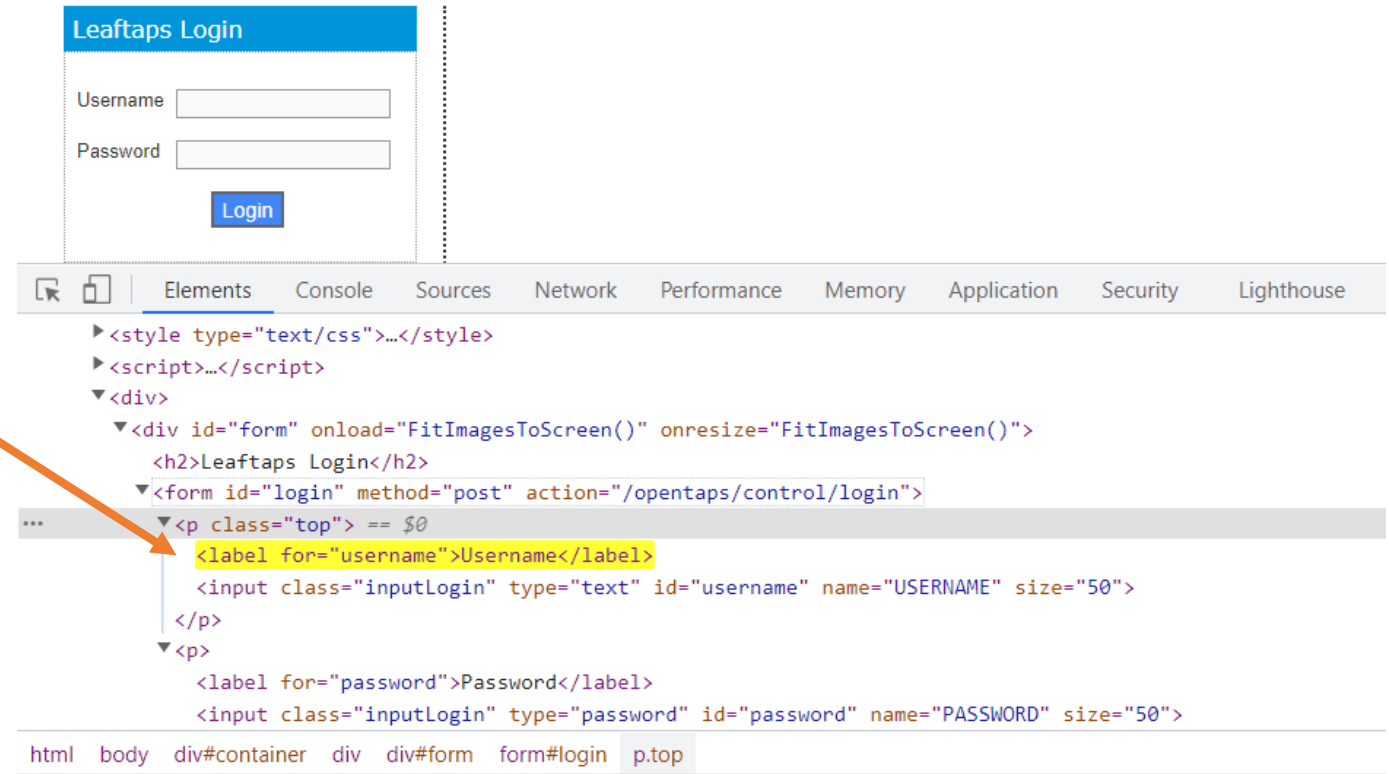
//label[text()='Username']/following-sibling::input

Contd..

Xpath-Axes(type 6 of 8)

Younger Sibling to elder Sibling:

To reach the WebElement from
Second <label> (child) to first<label> (child)
of same parent we have the keyword
preceding-sibling(finding from bottom to top)



Syntax:

Younger sibling relative xpath/preceding-sibling::tagName of Elder sibling

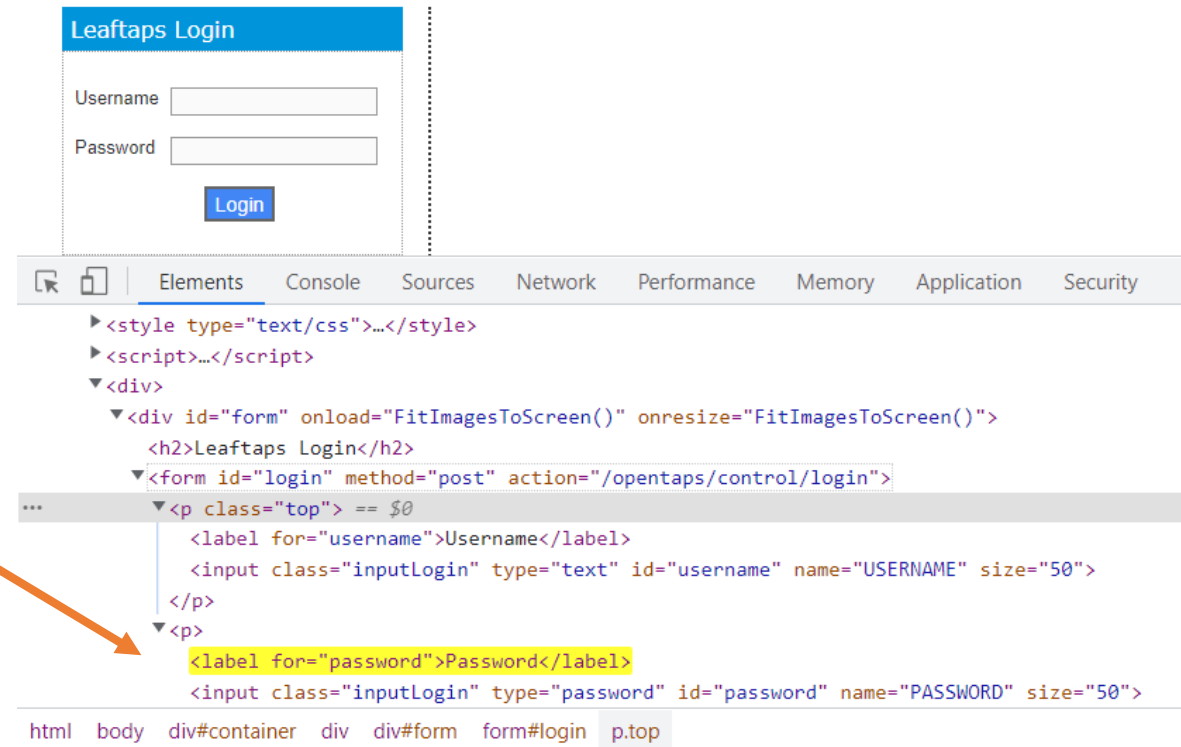
Example

`//input[@id='username']/preceding-sibling::label`

Xpath-Axes(type 7 of 8)

Elder cousin to Younger cousin :

To reach the WebElement from first parent child <label> (child) to second parent child <label> (child) we have the keyword **following** (finding from top to bottom)



Syntax:

Elder cousing relative xpath/following::tagName of younger Cousin

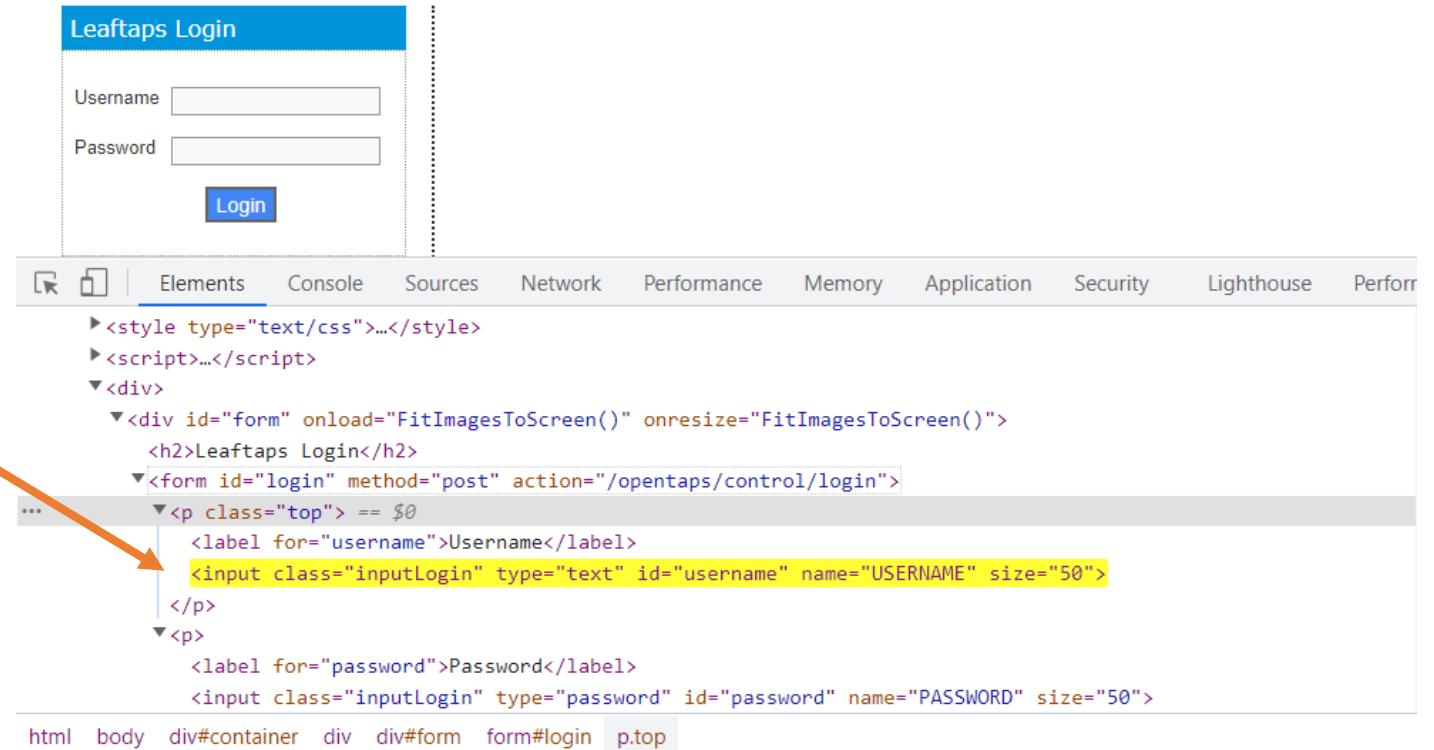
Example

//input[@id='username']/following-sibling::label

Xpath-Axes(type 8 of 8)

Younger cousin to Elder cousin :

To reach the WebElement from second parent child <label> **(child)** to first parent child <label> **(child)** we have the keyword **preceding**(finding from bottom to top)



Syntax:

Younger cousin xpath/preceding::tagName of Elder cousin

Example

//label[text()='Password']/preceding::input

Quick Recall

- ✓ Axes Xpath-What , when, How?
- ✓ 8 types of Relationship based Xpath
 - Parent to Child & Viceversa
 - Grandparent to Grandchild & Viceversa
 - Sibling:
 - Elder to younger
 - Younger to Elder
 - Cousin
 - Elder to younger
 - Younger to Elder

Classroom (Breakout)

1. Leaftaps- Find the XPath of 1st resulting result of find leads
2. Myntra -> mens jeans : Xpath to click on flying machine checkbox
3. Salesforce Login -> click on + -> new task -> Xpath for subject