HTML

- It stands for Hyper text markup language.
- It is used for creating web page.
- Describes the structure of web page.

Syntax

<html>

<Elemesnts.....>

</Elements....>

</html>

DOCUMENT TAGS

- <!DOCTYPE html>: Declares about document and version.
- <html>: The root element of entire Html document.</html>
- <head> Contains metadata about document, such as title and links.</head>
- <title> Define the document title, which appears in the browser.</title>
- <body> : content of Web page visible to user.</body>

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="
    width=device-width, initial-scale=1">
    <title></title>
</head>
<body>


</body>
</html>
```

HTML ELEMENTS AND ATTRIBUTES,

HTML Tags

- HTML Tags are starting and ending parts of an html elements.
- They started with"< " and ends with ">" symbol.
- What ever written inside "<" and " >" are called tags.

Example : .....

Html Elements.

- Html elements consists of both opening and closing tags as well as, content inside the tags.

Example :

 Academia International College

```
<b> Academia International College </b>
```

Academia International College

Html Attributes.

- Attributes is used to define the character of an HTML elements.
- It provides additional styling(attribute) to the elements.
- It always placed in the opening tag of an elements.

Example: Academia Int College.

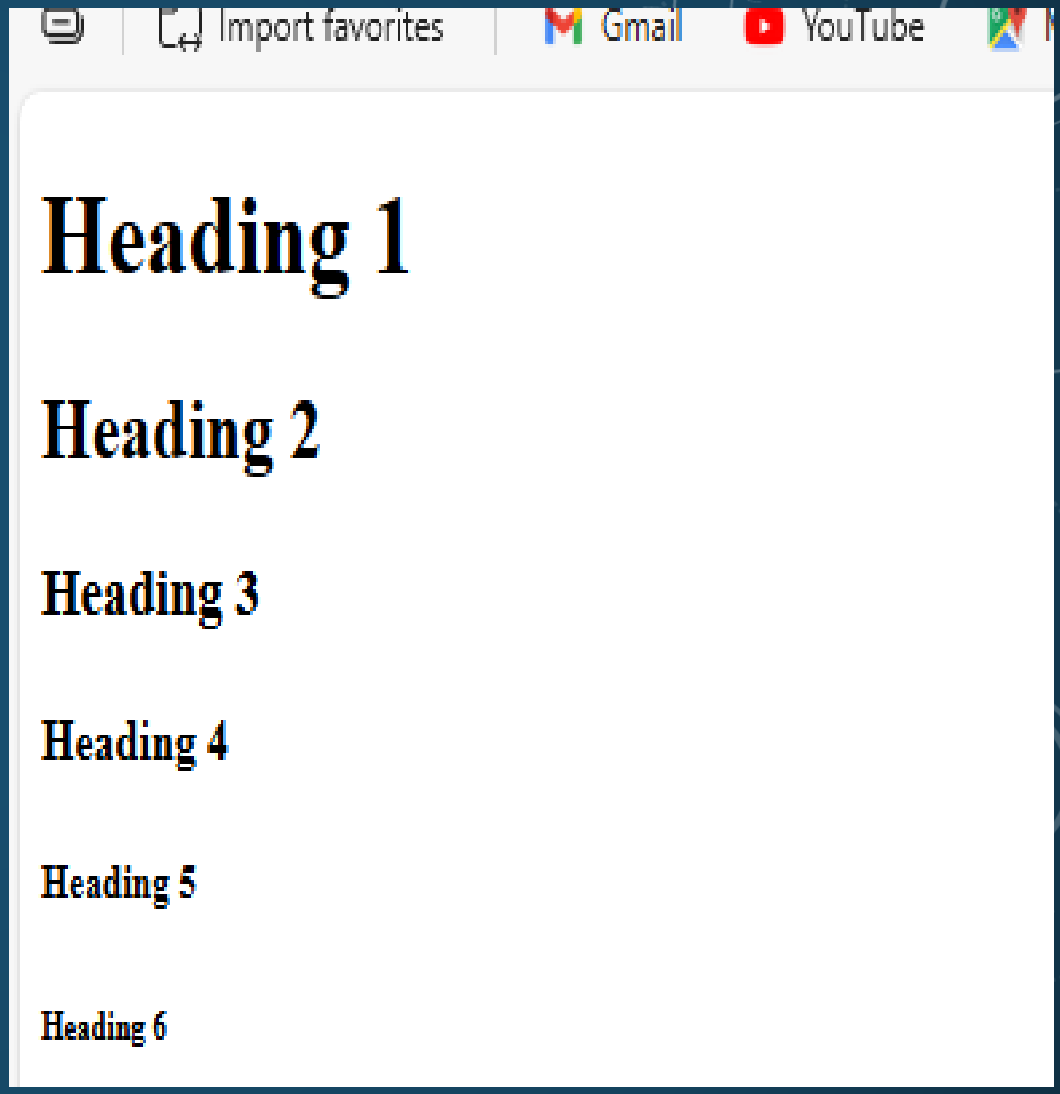
```
<p align="Center"> Academia Int College.</p>
```

TEXT & FORMATTING

- <h1> to <h6> : Define html heading started from <h1> and <h6> the least.
- <p>:Define paragraphs
-
: Single line break
- :bold text
- :italic
- <hr> :horizontal line
- : Define a devision or section in document.
- : A generic inline container for text or element.

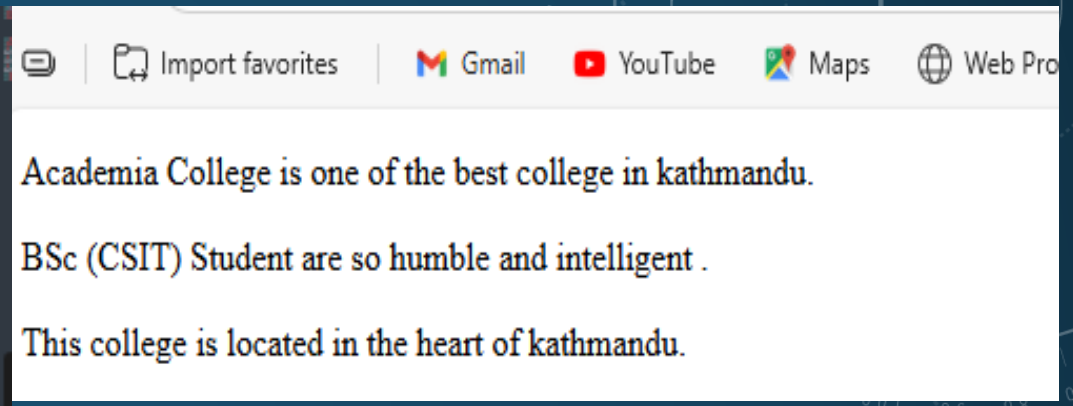
<h> heading </h> from <h1> to <h6>

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="
    width=device-width, initial-scale=1">
    <title>Academia Students</title>
</head>
<body>
<h1>Heading 1</h1>
<h2>Heading 2</h2>
<h3>Heading 3</h3>
<h4>Heading 4</h4>
<h5>Heading 5</h5>
<h6>Heading 6</h6>
</body>
</html>
```



<P> PARAGRAPH</P>

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="
    width=device-width, initial-scale=1">
    <title>Academia Students</title>
</head>
<body>
<p>Academia College is one of the best college in
kathmandu.</p>
<p>BSc (CSIT) Student are so humble and
intelligent .</p>
<p>This college is located in the heart of
kathmandu.</p>
</body>
</html>
```



LINKS & NAVIGATION

- <a>: Defines a hyperlink, used to link from another page.

Example:

```
<a href="next.html">
```

- <link>: link external resources to the document.
- <nav> Defines a block of navigation links

IMAGES & MULTIMEDIA

- <img> :Used for images

```
<img src="ban.JPG" height="400px" width="1300px">
```

- <audio>: Used for Audio or music file into webpage without needing extra plugin

```
<audio controls src="sametime.mp3"> your browser doesnot support!</audio>
```

- <video>: Used for video based content directly into webpage without extra plugin.

```
    <video autoplay width="150 px" height="160 px" controls>
  <source src="movie.mp4" type="video/mp4"> </video>
```

- List tags

I. Unorder List :An unorder list shows items with bullets(●) and the items are not in specific sequence

Example :

```
<ul>
<li> Gwarko </li>
<li> Kathmandu </li>
<li> Lalitpur</li>
</ul>
```

- Order List: An order list shows item in a specific order with number (1, 2, 3, 4,…….).

Example;

```
<ol>
<li> Gwarko </li>
<li> Kathmandu </li>
<li> Lalitpur</li>
</ol>
```

1. *Gwarko*
2. *Kathmandu*
3. *Lalitpur*

- Common list : Contain both Unorder and Order for their item either it will be in order list or Unorder list

 Item

```
<li>Gwarko</li>
<li>Kathmandu</li>
<li>Lalitpur</li>
```

- Button Tags

The html elements creates a clickable button on webpage which interact with.

<button> Name of button </button>

```
<button>Hello</button>
```

Perform other interactive action when clicked.

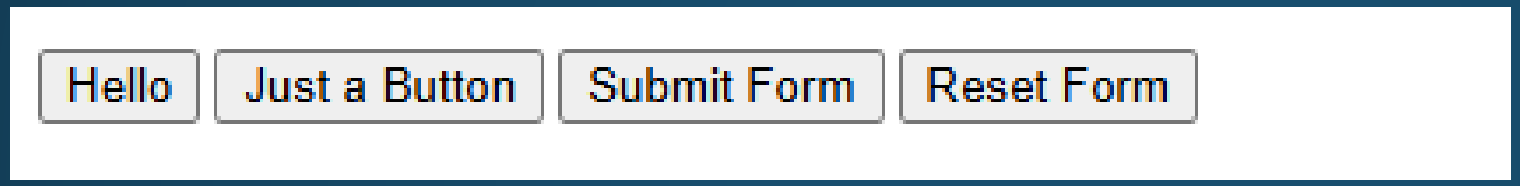
Where It is used?

Inside HTML form (Submit/Reset)

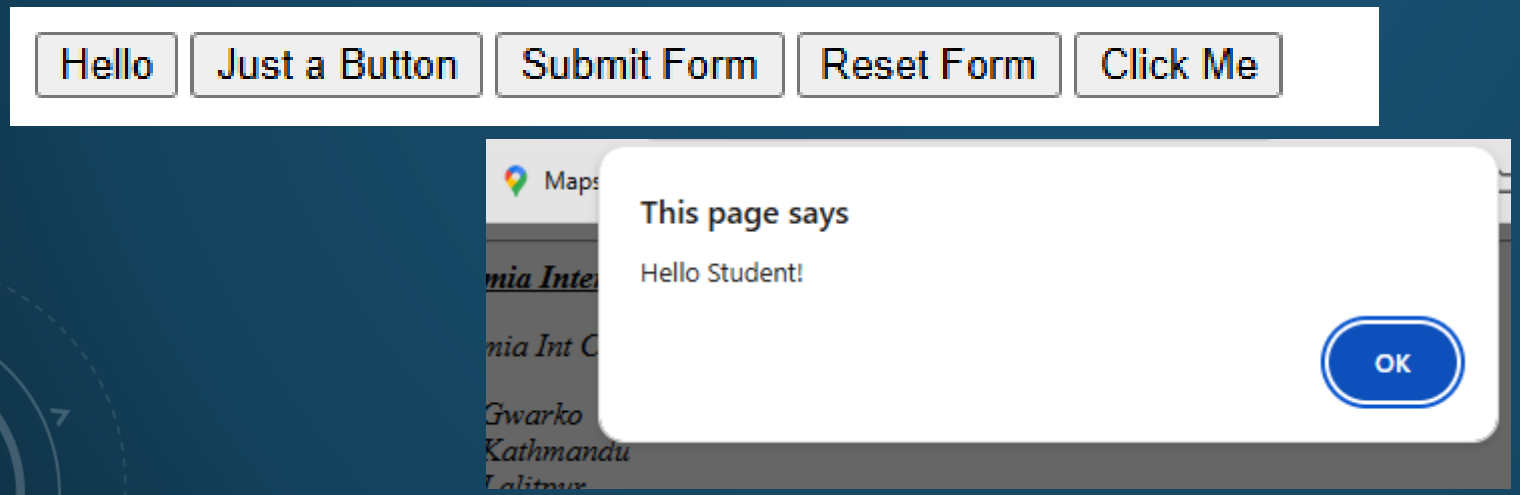
Outside forms from custom interactions.

With javascript event handler.

- <button type="button">Just a Button</button>
- <button type="submit">Submit Form</button>
- <button type="reset">Reset Form</button>



- <button onclick="alert('Hello Student!')">Click Me</button>

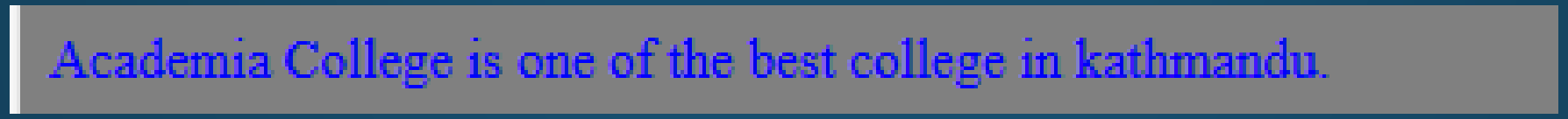


CSS

- Inline CSS: Use the style attributes directly within an html elements.
- This applies a unique style to a single elements.

Example:

```
<p style="color: blue; font-size: 15px;">Academia College is one of the best college in kathmandu.</p>
```



- Internal CSS: Use a style element within the heading section.
- This defines styles for the entire single page.

Example :

```
<head>
 <style>
  p
{
color: red;
}
</style>
</head>
```

BSc (CSIT) Student are humble and intelligent
But in the first semester students are came from different background
And they need to understand basics of HTML .

- External CSS: The most common and recommended method.
- It links an external css file to the HTML document using a <link>.
- In the heading section.

Example :

<head>

<link rel="stylesheet" href="style.css">

</head>

- Table tags

<table>tag used to define a table.

<table>

.....

.....

</table>

- Table Row

<tr> tag is used to define a row in a table.

<table>

<tr>

.....

</tr>

</table>

- Table heading

<th> tag is used to define header.

It is generally the top row of the table

<table

<tr>

<th> Name</th>

<th>Department</th>

</tr>

</table>

- Table Data

<td> used to include data inside the table.

```
<table>
<tr>
<th>Name   </th>
<th>Department</th>
</tr>
<tr>
<td> Ram</td>
<td> BCA</td>
</tr>
<tr>
<td> Krishna</td>
<td>IT</td>
</tr>
</table
```

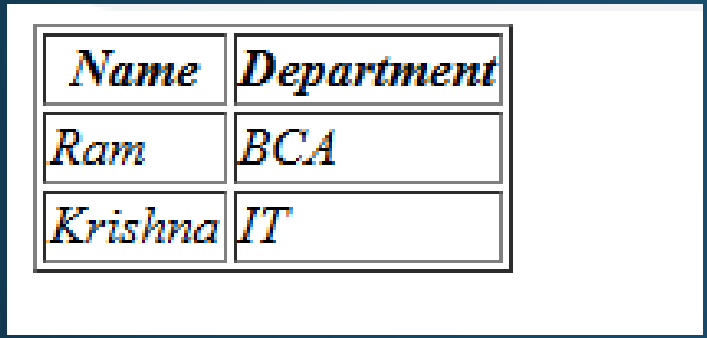
Name	Department
Ram	BCA
Krishna	IT

- Above example represent the category of data in particular row.
- The table header is bold and center because <th> tags has some default styling.

Table Border

The border attribute is used to add a border to a table and all the cells.

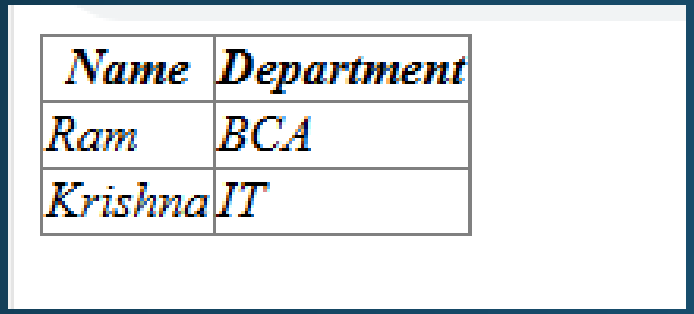
<table border="1">



Name	Department
Ram	BCA
Krishna	IT

To prevent double border like this example, we can set the border-collapse: property of the table.

- <table border="1" style="border-collapse: collapse;">



Name	Department
Ram	BCA
Krishna	IT

The HTML table can divided into three parts.

1. Table Header : Table head <thead> tag must come before any other tags inside a table

```
<table>
<thead>
<tr>……</tr>
</thead>
……
</table>
```

2. Table body : The table body<tbody> tag must come after <thead> and before other tags inside a table.

```
<table>
 <thead>
.....
</thead>
<tbody>
<tr>.....</tr>
<td> .....</td>
</tbody>
.....
</table>
```

3. Table Footer : <tfoot> tag must come after <tbody> and before any other tags inside a table.

```
<table>
 <thead>
.....
</thead>
<tbody>
.............
</tbody>
<tfoot>
<tr>
<td>.....</td>
</tr>
</tfoot>
</table>
```

- Example:

```
<table border="1" style="border-collapse: collapse;">
  <thead>
    <tr>
      <th>S.N</th>
      <th>Item</th>
      <th>Quantity</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>1</td>
      <td>Apple</td>
      <td>2</td>
    </tr>
    <tr>
      <td>2</td>
      <td>Mango</td>
      <td>1</td>
    </tr>
    <tr>
      <td>3</td>
      <td>Orange</td>
      <td>1</td>
    </tr>
  </tbody>
  <tfoot>
    <tr>
```

```
    <tr>
      <td>3</td>
      <td>Orange</td>
      <td>1</td>
    </tr>
  </tbody>
  <tfoot>
    <tr>
      <td></td>
      <td>Total</td>
      <td>4</td>
    </tr>
  </tfoot>
</table>


</form>
</body>
</html>
```

S.N	Item	Quantity
1	Apple	2
2	Mango	1
3	Orange	1
	Total	4

• Colspan:

Th colspan attribute merges cells across multiple columns.

```
<tfoot>
  <tr>
    <td></td>
    <td>Total</td>
    <td>4</td>
  </tr>
  <td colspan="2">Total item </td>
  <td>5</td>
</tfoot>
```

S.N	Item	Quantity
1	Apple	2
2	Mango	1
3	Orange	1
	Total	4
Total item		5

The value of the colspan determines how many columns the cell occupies.

As we see the last row has 2cell with cell occupying 2 columns.

• Rowspan

The rowspan attribute merges cells across multiple rows.

The values of rowspan determine how many rows the cell occupies.

```
<table border="1">
  <tr>
    <th>Name</th>
    <th>Subject</th>
    <th>Marks</th>
  </tr>
  <tr>
    <td rowspan="3">Mark Sampanna</td>
    <td>English</td>
    <td>67</td>
  </tr>
  <tr>
    <td>Maths</td>
    <td>82</td>
  </tr>
  <tr>
    <td>Science</td>
    <td>91</td>
  </tr>
  <td colspan="2">Total marks </td>
    <td>240</td>
</table>
```

Name	Subject	Marks
Mark Sampanna	English	67
	Maths	82
	Science	91
Total marks		240

Name	Subject	Marks
Mark Bigya	English	77
	Maths	82
	Science	81
Total marks		240