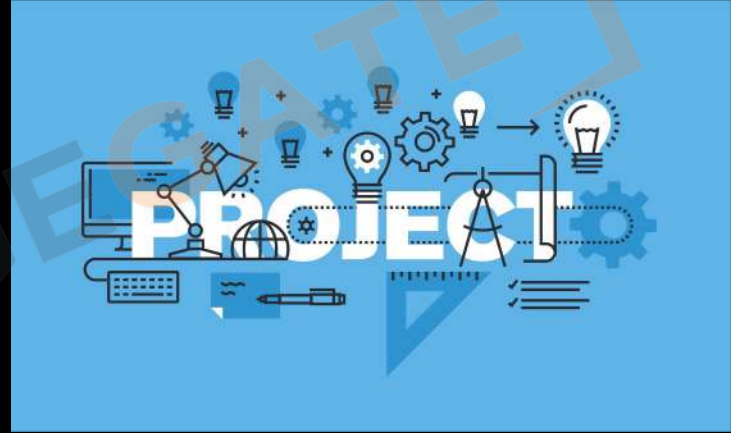


# Practice Exercise

## HTML Basics

1. Create a **new project** with Index.html
2. Generate boilerplate code using Emmet
3. Write “I am learning with **Prashant sir**”
4. Use **comments**
5. Also use **Case insensitive** tags



# Practice Exercise

## HTML Basics

**Assignment:** Adding Comments and Case Sensitivity

➤ **Objective:** Use comments and demonstrate case sensitivity in HTML.

➤ **Instructions:**

- Open your index.html file in VS Code.
- Add a comment at the top of the file: `<!-- This is my first HTML project -->`.
- Use various tags in different cases (e.g., `<H1>`, `<p>`, `<DIV>`, `<Span>`).
- Ensure that the HTML is still valid and displays correctly in the browser.
- Add another comment explaining why HTML is case-insensitive but best practice is to use lowercase.

# Practice Exercise

## HTML Basics

### Assignment:

- **Objective:** Utilize MDN documentation for HTML.
- **Instructions:**
  - Visit [MDN Web Docs](#).
  - Find the documentation for the `<h1>` tag.
  - Write a short summary of what you learned about the `<h1>` tag from the documentation.
  - Include an example usage of the `<h1>` tag in your `index.html` file.

# Must-Use HTML Tags

## 1. HTML Attributes

1. What are HTML Attributes
2. Id Property

## 2. HTML Tags

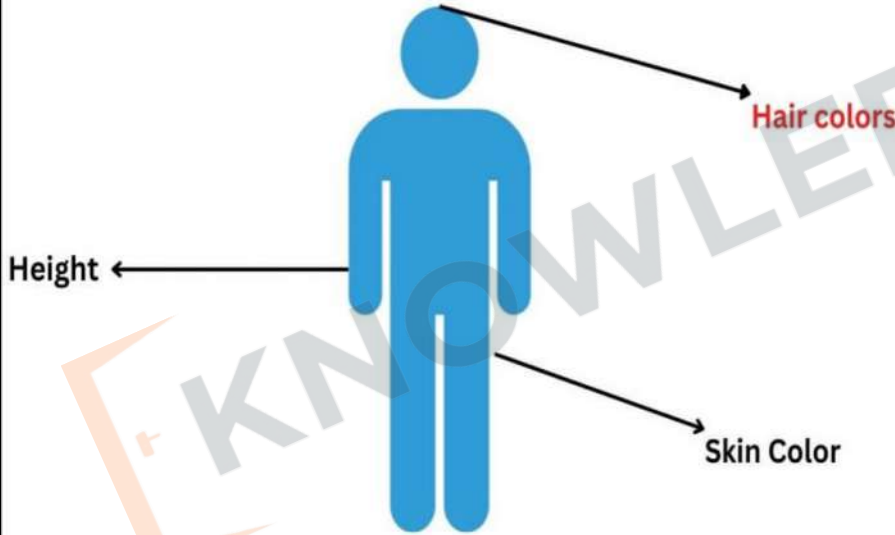
1. <BR> tag
2. <HR> tag
3. Image Tag
4. Video Tag
5. Anchor Tag
6. Bold / Italic / Underline / Strikethrough
7. Pre Tag
8. Big / Small Tag
9. Superscript / Subscript

## 3. Character Entity Reference

1. What are Character Entity References

# Must-Use HTML Tags

## Attribute



## 1. HTML Attributes

# 1.1 What are HTML Attributes?

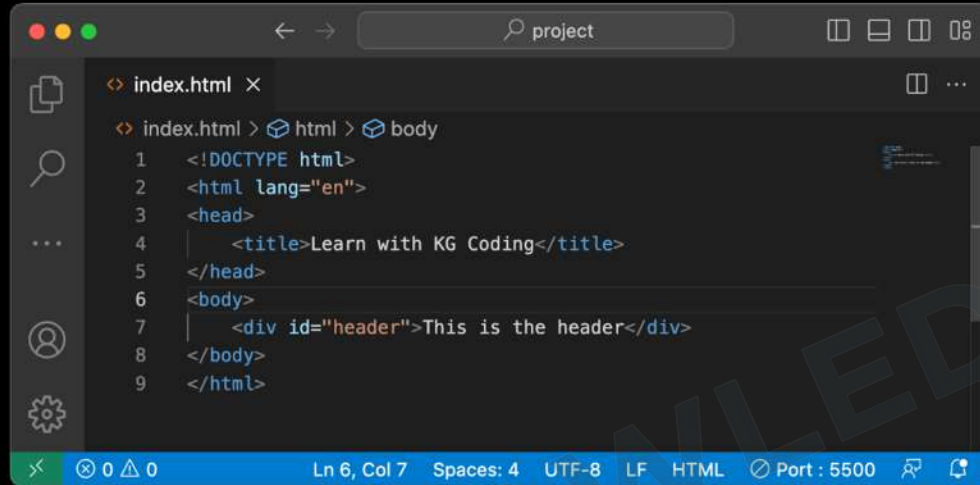
## Html Attributes

Attribute

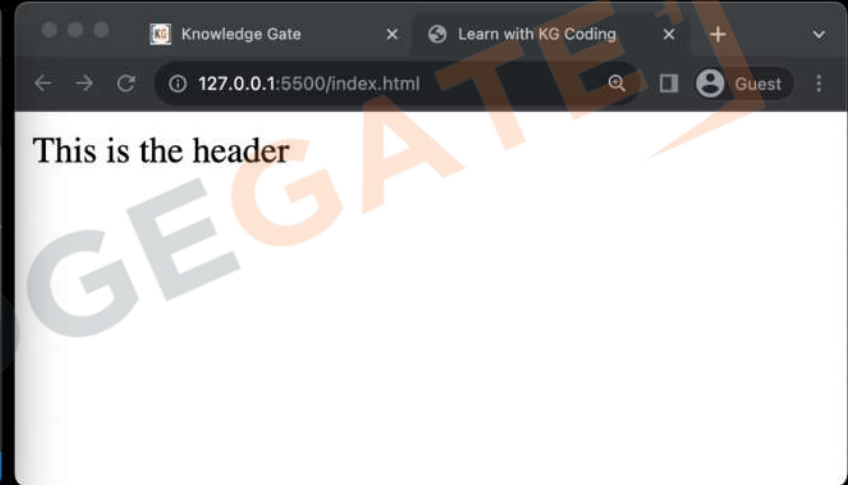
`<tag attribute="value">Text Content </tag>`

1. Provides **additional information** about elements
2. Placed **within opening tags**
3. Common examples: **href**, **src**, **alt**
4. Use **name=value** format
5. Can be **single** or **multiple** per element

# 1.2 id property



```
<> index.html X
<> index.html > html > body
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4  |   <title>Learn with KG Coding</title>
5  </head>
6  <body>
7  |   <div id="header">This is the header</div>
8  </body>
9  </html>
```



- **Unique Identifier:** Each id should be unique within a page.
- **Anchoring:** Allows for direct links to sections using the `#id` syntax in URLs.
- **CSS & JavaScript:** Used for selecting elements for styling or scripting.

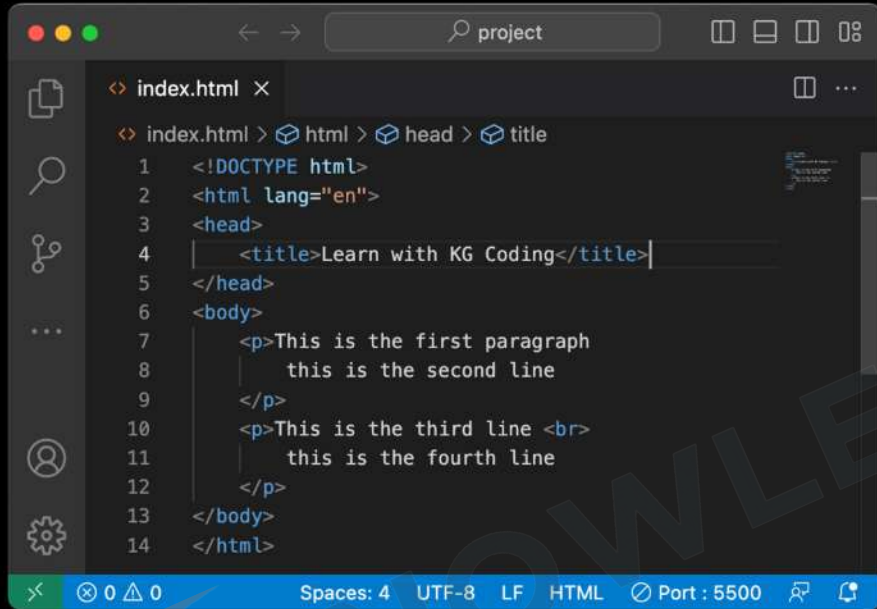
# Must-Use HTML Tags



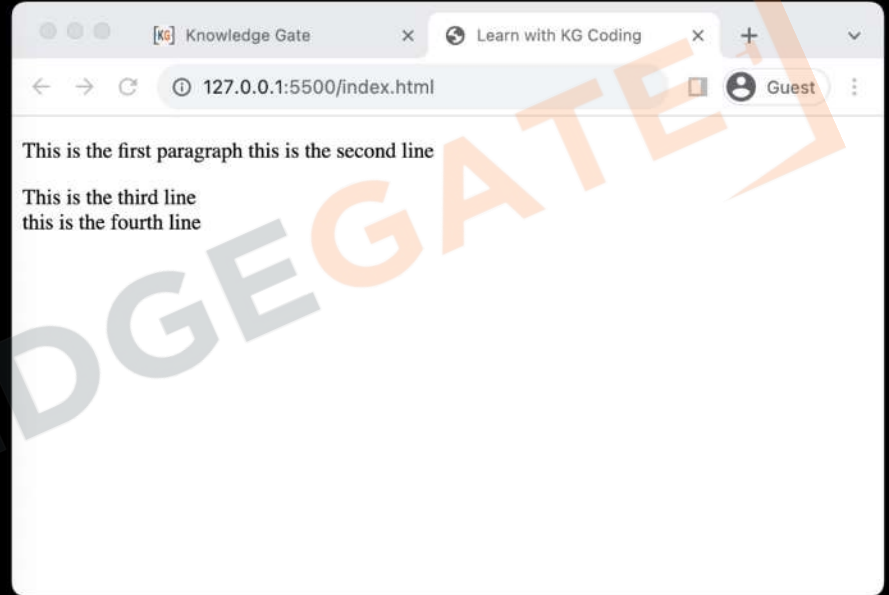
## 2. HTML Tags



## 2.1 <BR> Tag

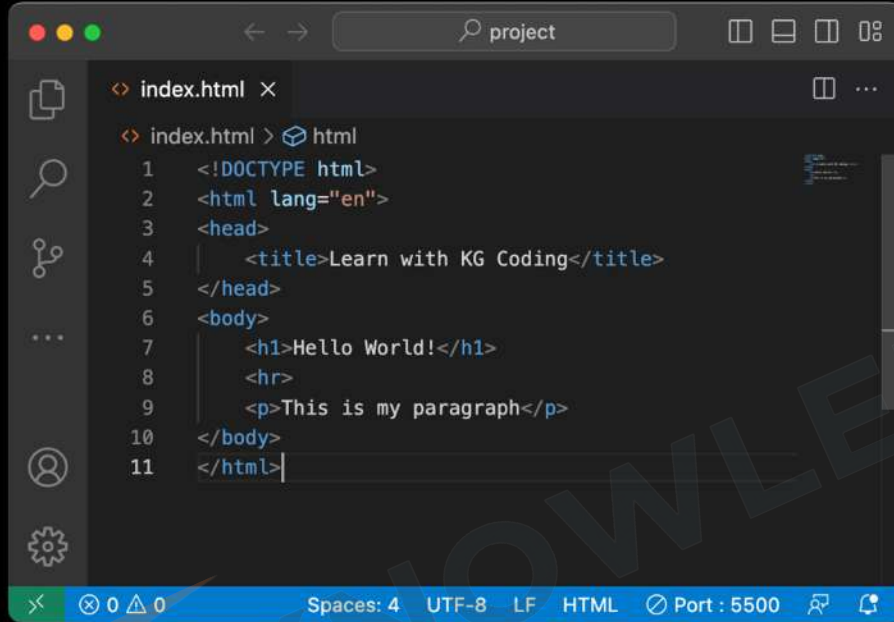


```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <title>Learn with KG Coding</title>
5 </head>
6 <body>
7   <p>This is the first paragraph
8     this is the second line
9 </p>
10  <p>This is the third line <br>
11    this is the fourth line
12 </p>
13 </body>
14 </html>
```

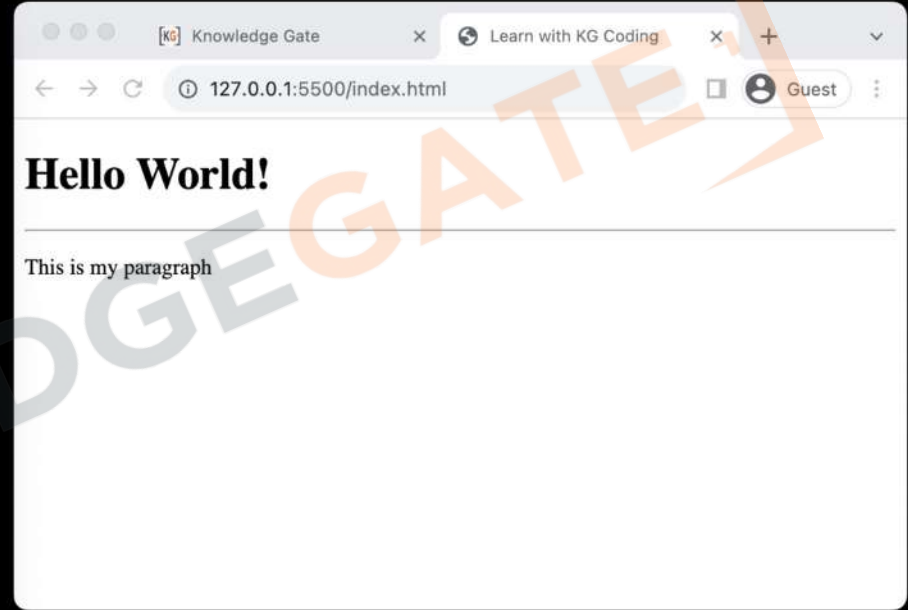


1. **<br>** adds a **line break** within text
2. **<br>** is empty, no closing tag needed
3. **<br>** and **<br />** are both valid

## 2.2 <HR> Tag



```
index.html x
index.html > html
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <title>Learn with KG Coding</title>
5 </head>
6 <body>
7   <h1>Hello World!</h1>
8   <hr>
9   <p>This is my paragraph</p>
10 </body>
11 </html>
```



1. `<hr>` creates a horizontal rule or line
2. `<hr>` also empty, acts as a divider

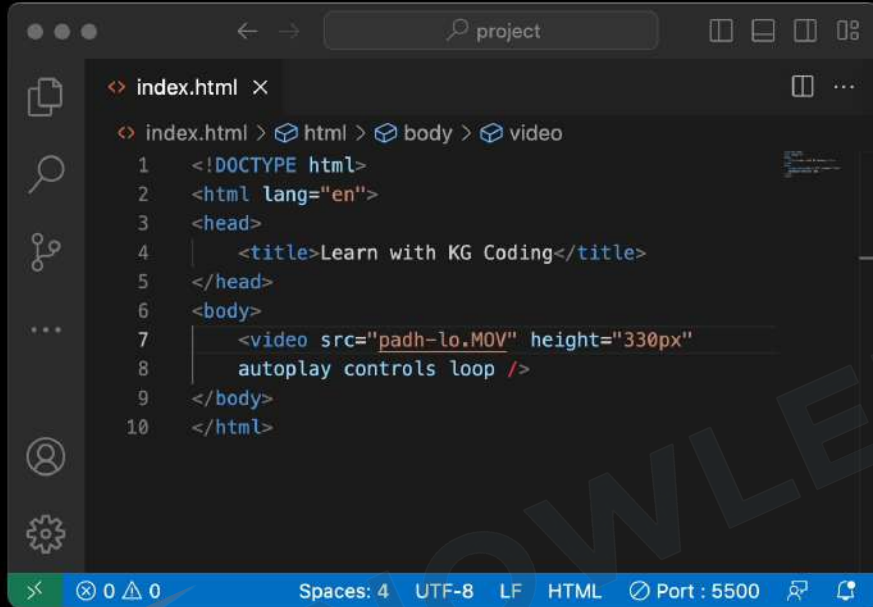
## 2.3 Image Tag

```
index.html X
index.html > html > body > image
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <title>Learn with KG Coding</title>
5 </head>
6 <body>
7   <image src="sanchitsir.png"
8     alt="Sanchit Sir Passport photo"
9     height="300px">
10 </body>
11 </html>
```



1. Used to embed **images**
2. Utilizes the **src** attribute for image URL
3. **alt** attribute for alternative text
4. Can be resized using **width** and **height**
5. **Self-closing**, doesn't require an end tag

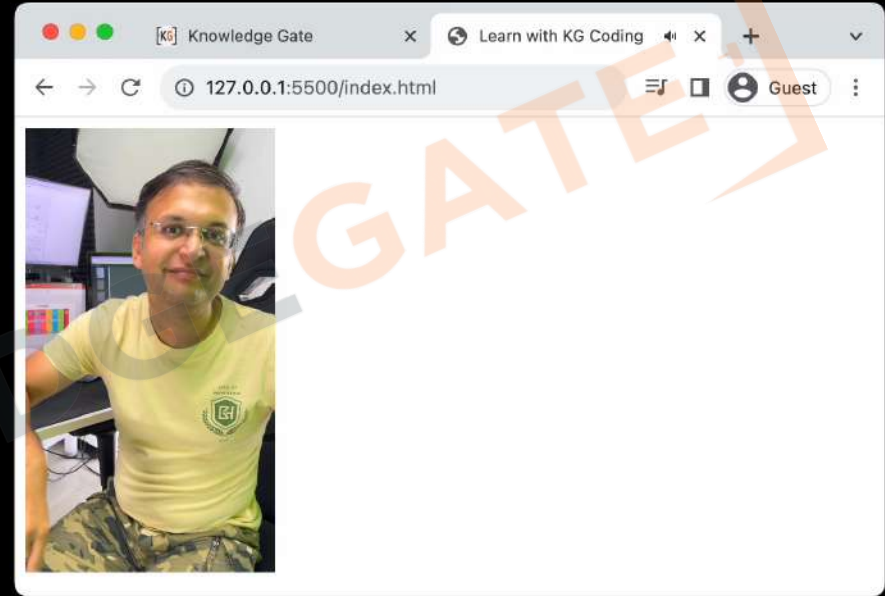
## 2.4 Video Tag



A screenshot of a code editor window titled 'project'. The editor shows the 'index.html' file with the following HTML code:

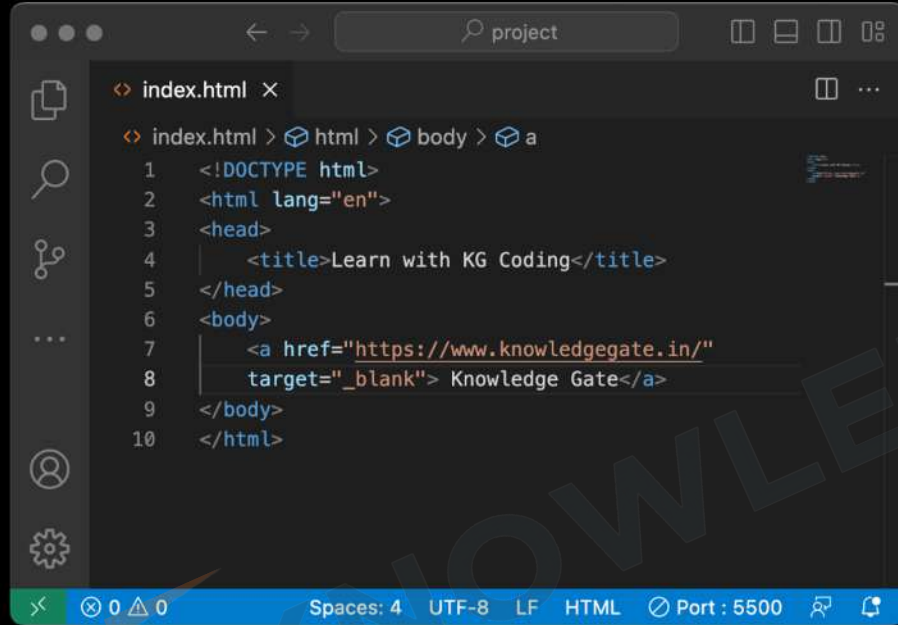
```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Learn with KG Coding</title>
</head>
<body>
  <video src="padh-lo.MOV" height="330px"
    autoplay controls loop />
</body>
</html>
```

The code editor interface includes a sidebar with icons for file explorer, search, and settings. The status bar at the bottom shows 'Spaces: 4', 'UTF-8', 'LF', 'HTML', and 'Port: 5500'.

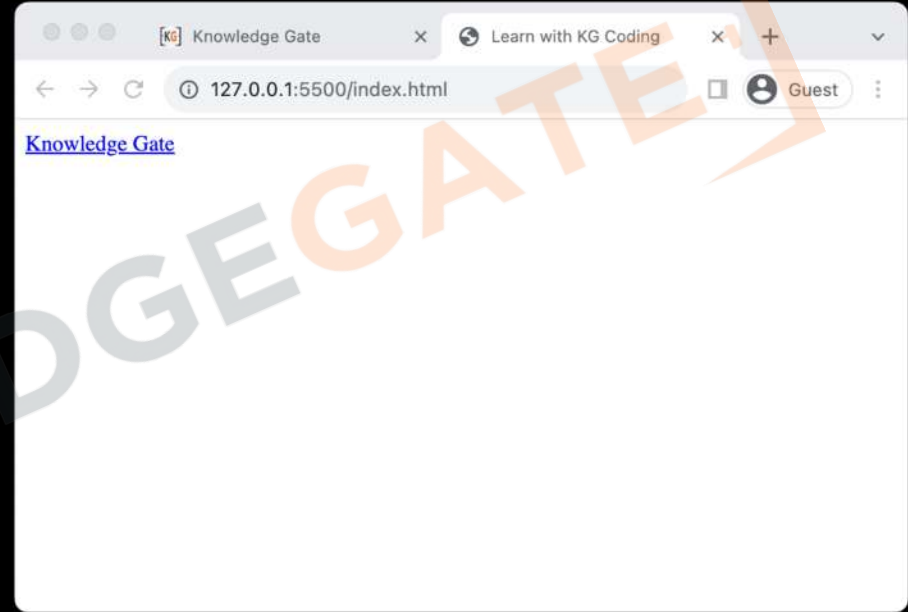


1. Embeds video files on a page
2. Uses **src** attribute for video URL
3. Supports **multiple formats** like MP4, WebM
4. Allows for built-in controls via attributes like **autoplay, controls, loop**

## 2.5 Anchor Tag

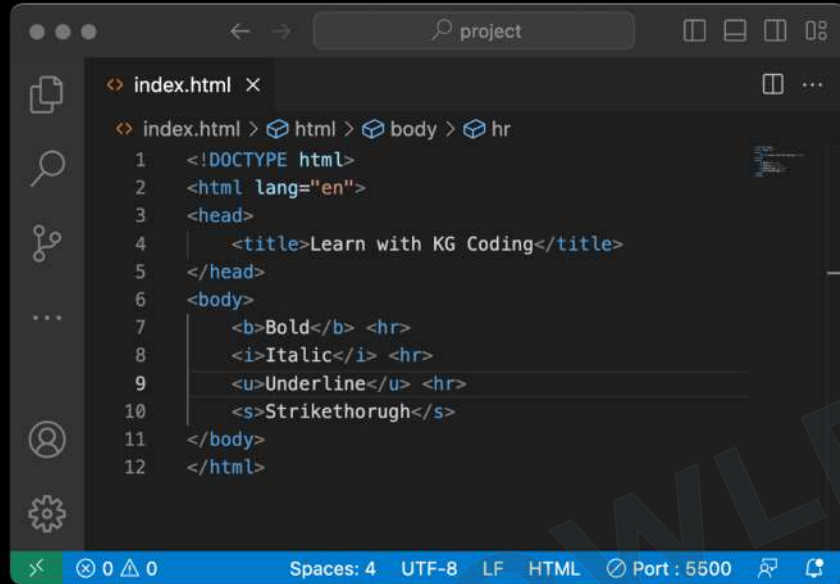


```
index.html > html > body > a
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <title>Learn with KG Coding</title>
5 </head>
6 <body>
7   <a href="https://www.knowledgegate.in/"
8     target="_blank"> Knowledge Gate</a>
9 </body>
10 </html>
```



1. Used for creating **hyperlinks**
2. Requires **href** attribute for URL
3. Can link to external sites or internal pages
4. Supports **target** attribute to control link behavior

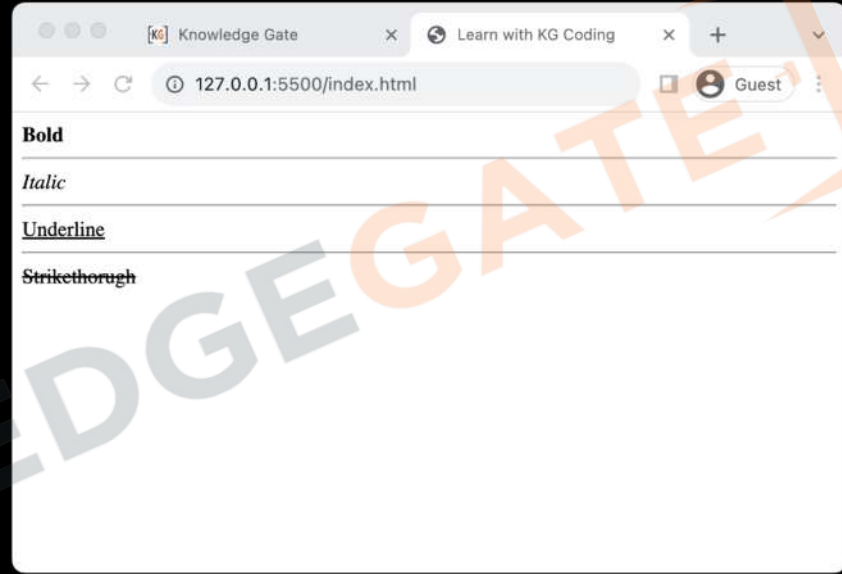
## 2.6 Bold/Italic/Underline/Strikethrough Tag



A screenshot of a code editor window titled 'index.html'. The editor shows the following HTML code:

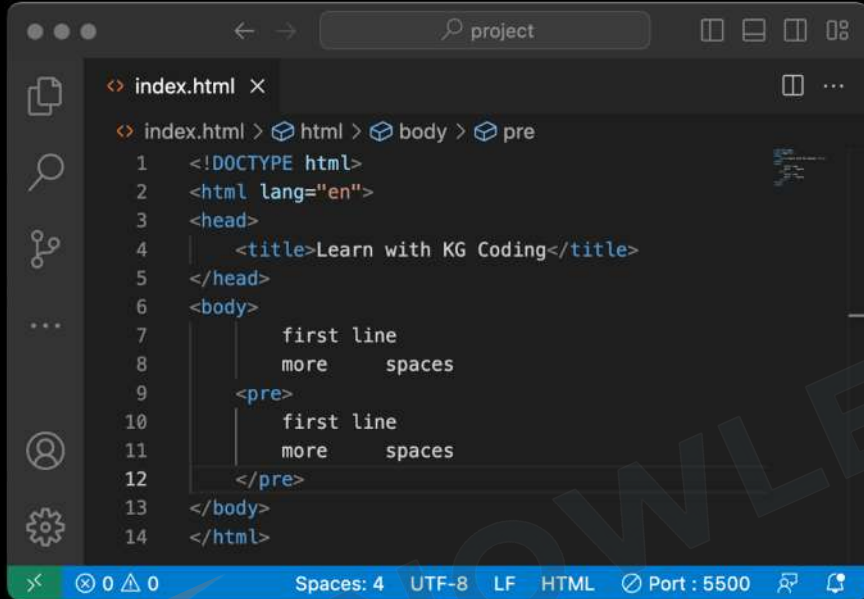
```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <title>Learn with KG Coding</title>
5 </head>
6 <body>
7   <b>Bold</b> <hr>
8   <i>Italic</i> <hr>
9   <u>Underline</u> <hr>
10  <s>Strikethrough</s>
11 </body>
12 </html>
```

The status bar at the bottom indicates 'Spaces: 4', 'UTF-8', 'LF', 'HTML', and 'Port: 5500'.

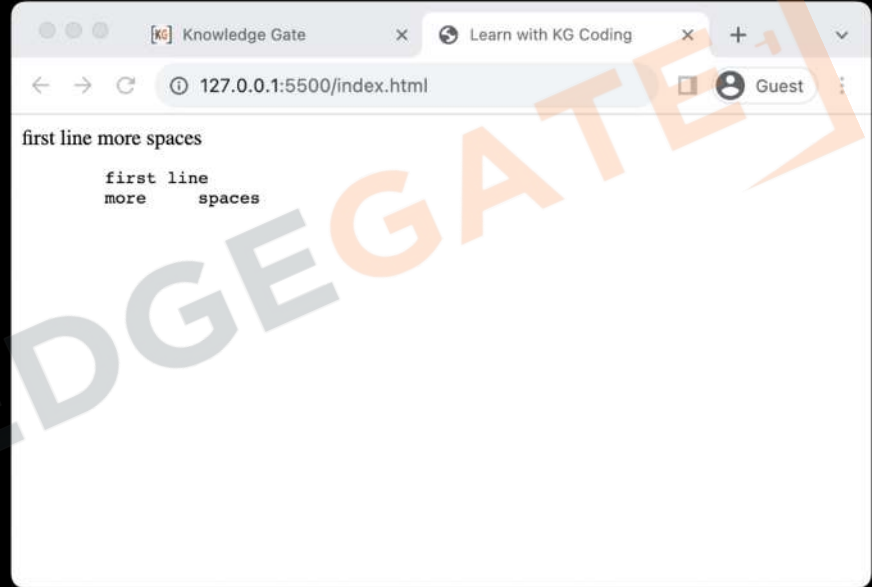


1. **<b>** makes text **bold**
2. **<i>** makes text *italic*
3. **<u>** underlines text
4. **<s>** or **<strike>** applies ~~strikethrough~~
5. Primarily used for text styling and emphasis

## 2.7 Pre Tag

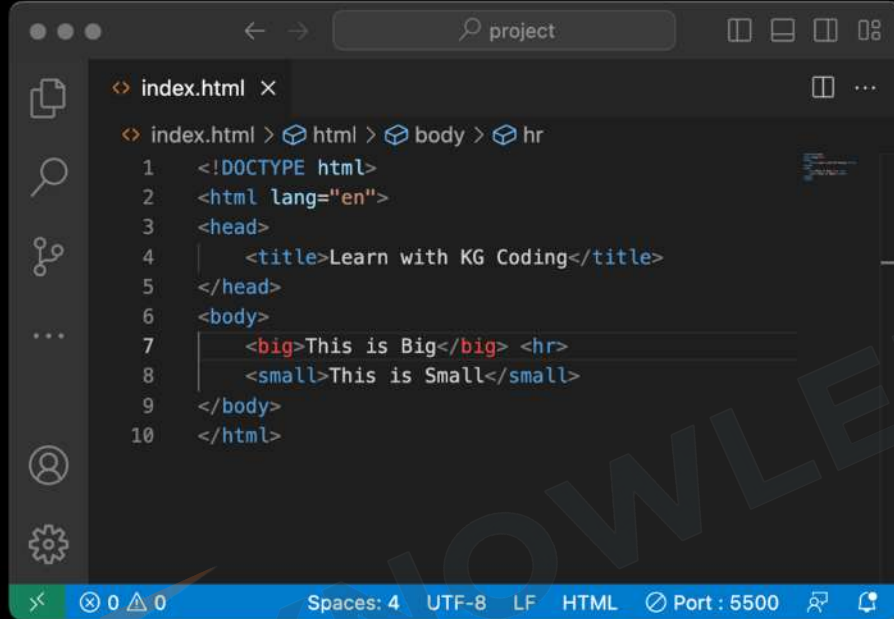


```
<?xml version="1.0" encoding="UTF-8" ?>
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Learn with KG Coding</title>
</head>
<body>
  first line
  more   spaces
  <pre>
    first line
    more   spaces
  </pre>
</body>
</html>
```

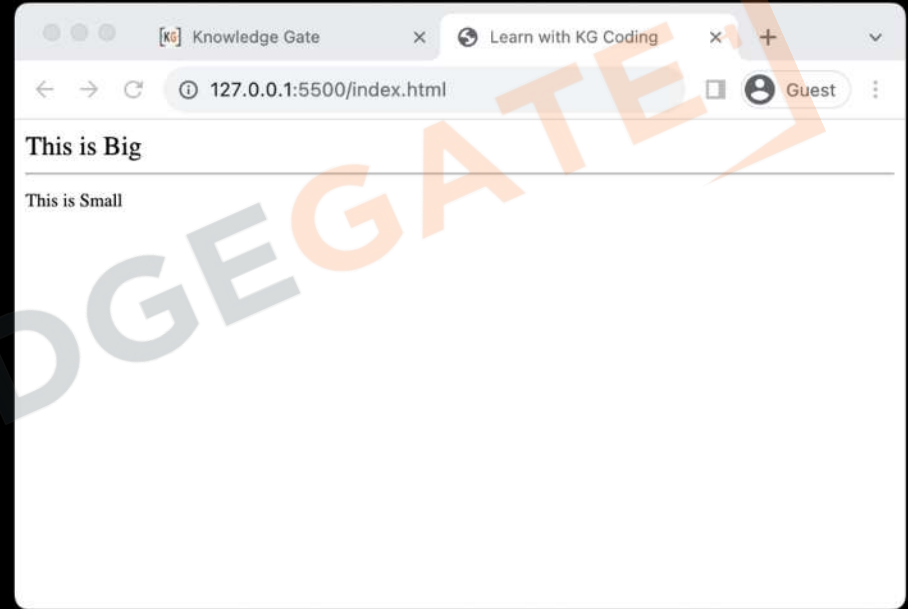


1. Preserves text formatting
2. Maintains whitespace and line breaks
3. Useful for displaying code
4. Enclosed within `<pre>` and `</pre>` tags

## 2.8 Big/Small Tag



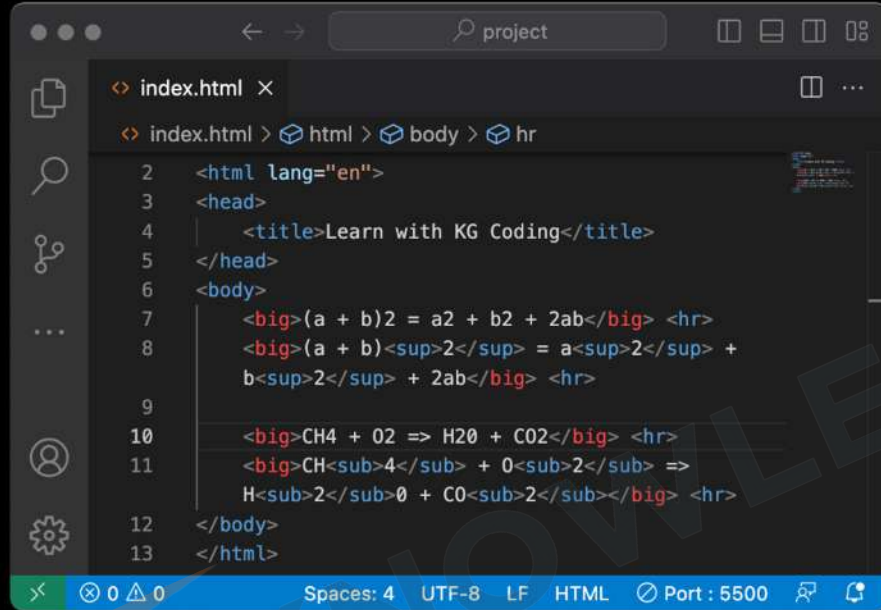
```
<?index.html X
<?index.html > html > body > hr
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4  |   <title>Learn with KG Coding</title>
5  </head>
6  <body>
7  |   <big>This is Big</big> <hr>
8  |   <small>This is Small</small>
9  </body>
10 </html>
```



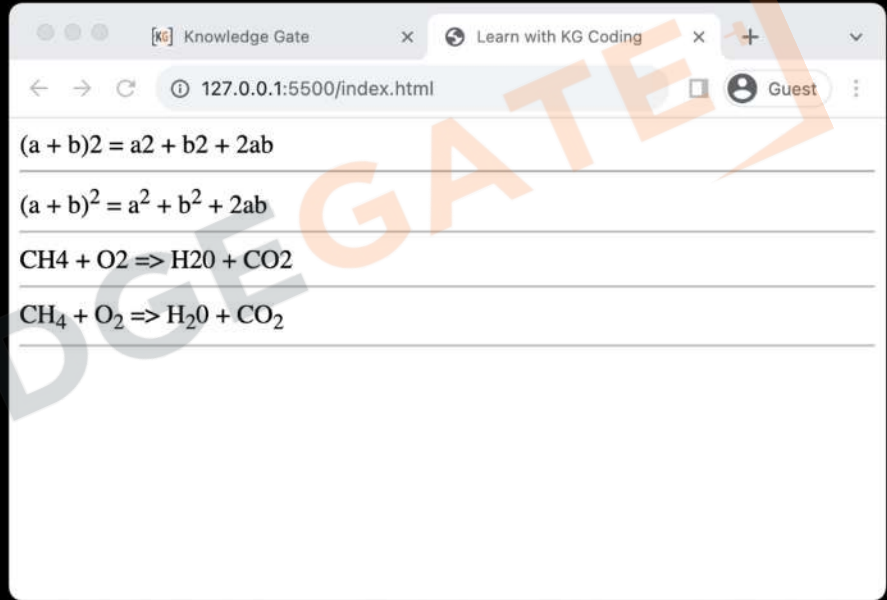
1. **<big>** increases text size
2. **<small>** decreases text size
3. Less common due to CSS alternatives



## 2.9 Superscript/Subscript Tag



```
index.html x
index.html > html > body > hr
2 <html lang="en">
3 <head>
4 <title>Learn with KG Coding</title>
5 </head>
6 <body>
7 <big>(a + b)2 = a2 + b2 + 2ab</big> <hr>
8 <big>(a + b)<sup>2</sup> = a<sup>2</sup> +
  b<sup>2</sup> + 2ab</big> <hr>
9
10 <big>CH4 + O2 => H2O + CO2</big> <hr>
11 <big>CH<sub>4</sub> + O<sub>2</sub> =>
  H<sub>2</sub>O + CO<sub>2</sub></big> <hr>
12 </body>
13 </html>
```



1. **<sup>** makes text superscript
2. **<sub>** makes text subscript
3. Used for mathematical equations, footnotes
4. Does not change font size, just position

# Level 2

Must-Use HTML Tags

## 3.Character Entity Reference

# 3.1 Character Entity Reference

1. Used to display **reserved** or **special** characters
2. Syntax often starts with **&** and ends with **;** (e.g., **&amp;** for **&**)

	&nbsp;	–	&ndash;	–	&minus;	°	&deg;	Δ	&Delta;	α	&alpha;
€	&euro;	—	&mdash;	±	&plusmn;	°	&ordm;	Λ	&Lambda;	β	&beta;
¢	&cent;	...	&hellip;	√	&radic;	ª	&ordf;	⊖	&Theta;	γ	&gamma;
£	&pound;	§	&sect;	∞	&infin;	¹	&sup1;	Ξ	&Xi;	δ	&delta;
¥	&yen;	¶	&para;	∞	&prop;	²	&sup2;	Π	&Pi;	ε	&epsilon;
¤	&curren;	†	&dagger;	×	&times;	³	&sup3;	Σ	&Sigma;	ζ	&zeta;
ƒ	&fnof;	‡	&Dagger;	÷	&divide;	¼	&frac14;	Φ	&Phi;	η	&eta;
©	&copy;	¡	&iexcl;	~	&sim;	½	&frac12;	Ψ	&Psi;	θ	&theta;
®	&reg;	¿	&iquest;	≈	&asymp;	¾	&frac34;	Ω	&Omega;	ι	&iota;
™	&trade;	‰	&permil;	≡	&cong;	∴	&there4;	▽	&nabla;	κ	&kappa;

# Must-Use HTML Tags

1. Create a page with **heading**, **paragraph**, **line breaks** and **separators**.
2. Use an **image** with height 300, which is a **link** to another page.
3. Use **bold**, *italic*, underline and ~~strike through~~ in one line.
4. Write third equation of motion using **superscript** and **subscript**.

