



Information Technology Department - State Polytechnic of Malang

Jobsheet-1: Web Server Installation and Basic HTML

Course: Web Programming / Web Design and Programming

Instructor: Web Design and Programming Teaching Team

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Student Identity

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Class : 2G
Major : D-IV Business Information System

Topic

- Introduction to Basic Concepts of the Internet and Web
- Laragon Installation
- Introduction to HTML Fundamentals

Objectives

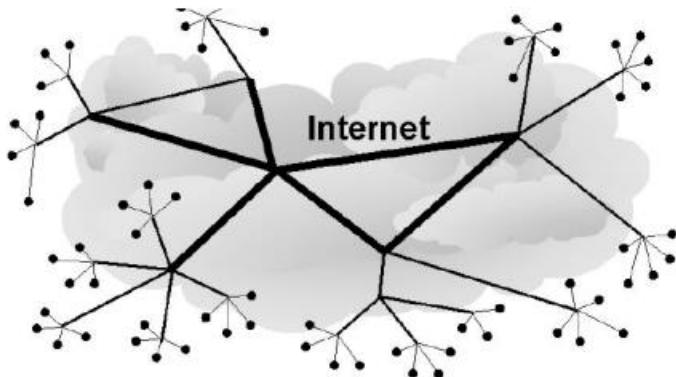
Students are expected to:

1. Understand the basic concepts of the Internet and the web
2. Install Laragon as web server
3. Be able to create static websites using HTML

Introduction

What is the Internet ?

- A large network of computers.
- Network of networks
- Operates based on the TCP/IP protocol



Picture 1. Internet Network

What are the services provided by the Internet ?

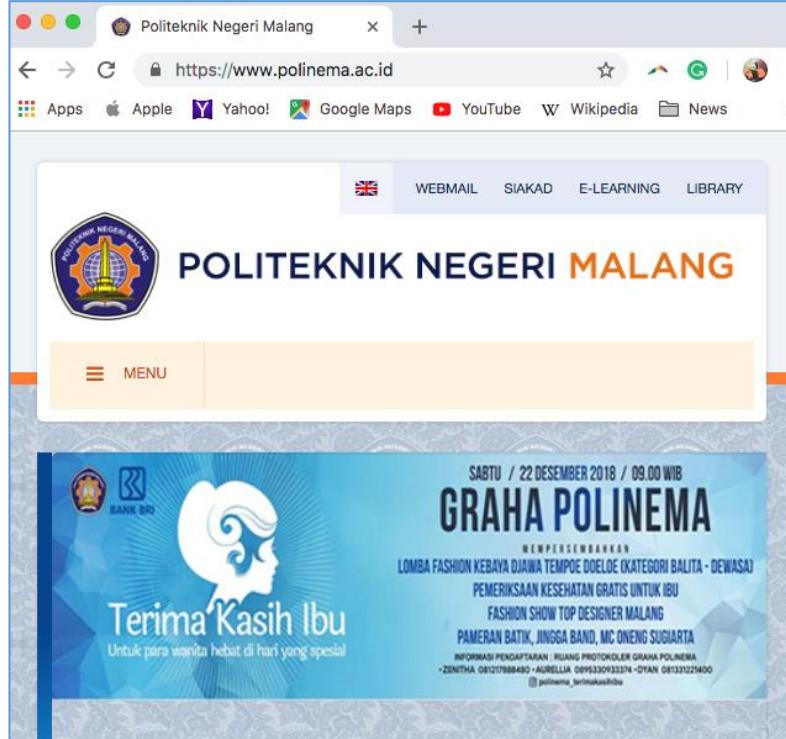
- *World Wide Web* (WWW): operates with the HTTP protocol
- E-mail: operates with *Post Office Protocol* (POP), *Simple Mail Transfer Protocol* (SMTP), *Internet Message Access Protocol* (IMAP)
- Chat : *Internet Relay Chat* (IRC)
- File Transfer: *File Transfer Protocol* (FTP)
- Remote Access: *telnet*, *Shell Secure* (SSH)
- VoIP (Voice over Internet Protocol)
- etc

Website and Web Applications

- Website (WWW)

A website is a collection of interlinked web pages that can be accessed through a homepage using a browser.

For example, when accessing the website at www.polinema.ac.id, the homepage will appear as follows.



Picture 2. Homepage

Meanwhile, a web page is a part of the homepage that appears as a menu or link where, when clicked, will open a new page with information different from the homepage.

- *Static Web Statis vs Dynamic Web*

Static Web is a website where users cannot directly change the content of the web using a browser. The interaction between the user and the server is limited to processing links. These web pages do not have a database. The data and information on a static website do not change unless its syntax is altered. The web document sent to the client will be the same as what is on the web server.

Dynamic Web is a website where the interaction between the user and the server is very complex. A person can change the content of certain pages using a browser. Requests from users can be processed by the server and then displayed with different contents according to its program flow. These web pages are connected to a database, so a dynamic website will have different information and data depending on the input provided by the client. The document received by the client will be different from the document on the server.

How does a website work ?

1. When user enters the URL in the browser

<https://www.google.com>

2. The browser will translate the URL into an IP address and connect to the server via TCP on port 80 (HTTP service).

- In this case, we use the 'ping' command in CMD as an example.

```

Command Prompt
Microsoft Windows [Version 10.0.22631.4037]
(c) Microsoft Corporation. All rights reserved.

C:\Users\zawar>ping google.com

Pinging google.com [142.251.12.100] with 32 bytes of data:
Reply from 142.251.12.100: bytes=32 time=37ms TTL=108
Reply from 142.251.12.100: bytes=32 time=37ms TTL=108
Reply from 142.251.12.100: bytes=32 time=37ms TTL=108
Reply from 142.251.12.100: bytes=32 time=36ms TTL=108

Ping statistics for 142.251.12.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 36ms, Maximum = 37ms, Average = 36ms

C:\Users\zawar>

```

3. Through the established connection, the browser sends a GET request (HTTP request)
 - GET/HTTP/1.1
4. The server responds with an HTTP response (including the header and the requested file in the body). The MIME type is also included to inform the browser about the file type (HTML, text, image, etc.)

Content-type: text/html

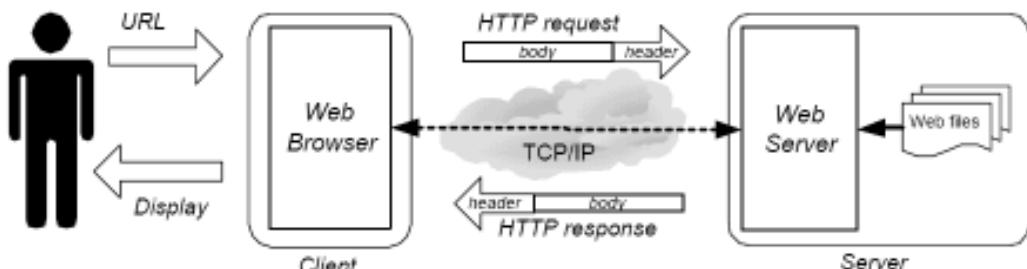
```

<html>
<head><title> Google </title></head>
<body>Welcome to google <img src='logo.gif'></body>
</html>

```

Picture 3. MIME Type

5. Files within the webpage, such as images, are not sent with the main file, so the browser must make additional requests to retrieve all the files on the webpage..
 - GET /logo.gif HTTP/1.0
6. The browser will render the content to be displayed to the user in the browser..
7. HTTP connections do not remain continuous; once a file is downloaded, the connection is terminated.

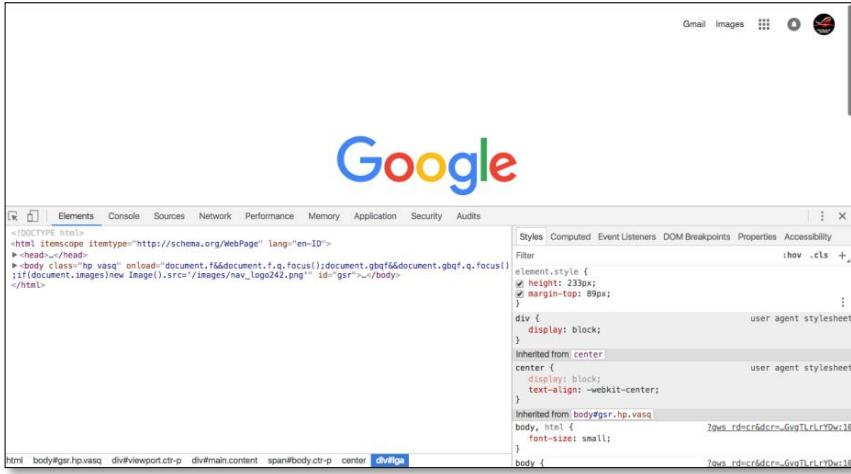


Picture 4. HTTP Request and Response

Hypertext Markup Language (HTML)

HyperText Markup Language (HTML) is a language used to create web pages, where formatting is done using simple hypertext written in ASCII format to produce an integrated visual display. HTML is an internet standard defined and regulated by the World Wide Web Consortium (W3C). HTML was created through a collaboration between Tim Berners-Lee and Robert Cailliau while they were working at CERN in 1989 (CERN is a high-energy physics research organization in Geneva).

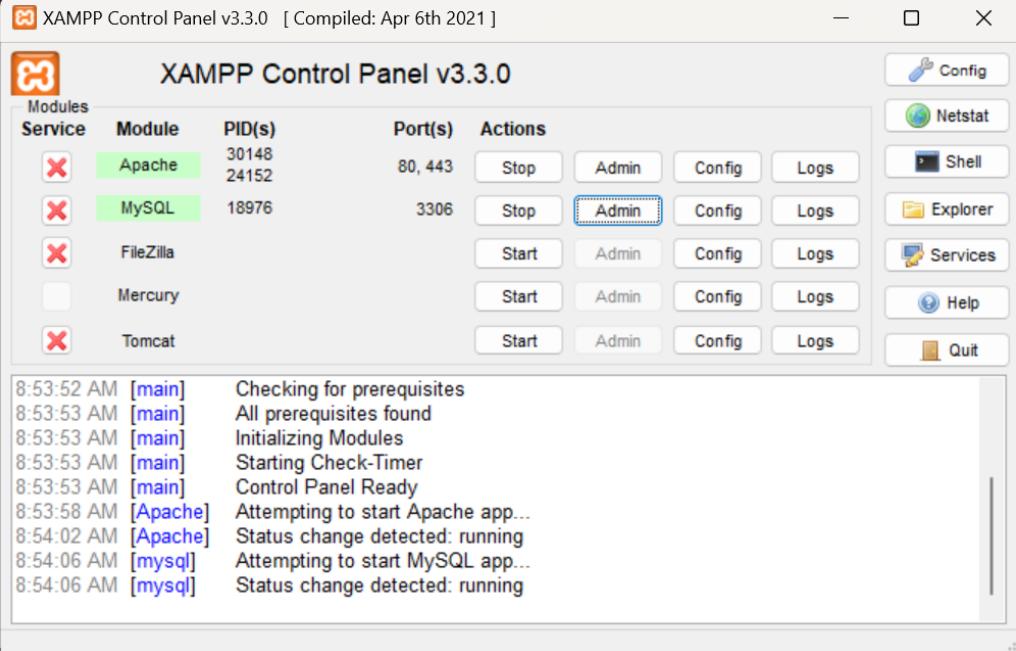
HTML can be read on various platforms and is a flexible programming language that can be combined with other programming languages such as PHP, ASP, JSP, and JavaScript. Certain tags in HTML documents define how text is formatted, and there are also other tags that specify how to respond to user actions. For example, open the page www.google.com, right-click in the browser (Chrome), and select "inspect," which will display the browser's developer tools as shown in Figure 5.



Picture 5. *Inspect Element*

In the first line, there is the text `<!DOCTYPE HTML>`, which indicates that the document you are viewing is an HTML document. On the second line, there is also the `<HTML>` tag, which further signifies that the code written within it is HTML code.

Practical Section 1. Laragon Installation

Steps	Description																														
1	Download Laragon that matches your operating system from the link https://laragon.org/download/ .																														
2	Install the Laragon that you downloaded in step 1.																														
3	<p>Open your browser, type <code>localhost</code>, and run it.</p> <p>Record the results (question No. 1). Include a screenshot of the display and provide an explanation. Please provide your answer below.</p>  <table border="1"> <thead> <tr> <th>Service</th> <th>Module</th> <th>PID(s)</th> <th>Port(s)</th> <th>Actions</th> </tr> </thead> <tbody> <tr> <td>Apache</td> <td></td> <td>30148 24152</td> <td>80, 443</td> <td>Stop Admin Config Logs</td> </tr> <tr> <td>MySQL</td> <td></td> <td>18976</td> <td>3306</td> <td>Stop Admin Config Logs</td> </tr> <tr> <td>FileZilla</td> <td></td> <td></td> <td></td> <td>Start Admin Config Logs</td> </tr> <tr> <td>Mercury</td> <td></td> <td></td> <td></td> <td>Start Admin Config Logs</td> </tr> <tr> <td>Tomcat</td> <td></td> <td></td> <td></td> <td>Start Admin Config Logs</td> </tr> </tbody> </table> <pre> 8:53:52 AM [main] Checking for prerequisites 8:53:53 AM [main] All prerequisites found 8:53:53 AM [main] Initializing Modules 8:53:53 AM [main] Starting Check-Timer 8:53:53 AM [main] Control Panel Ready 8:53:58 AM [Apache] Attempting to start Apache app... 8:54:02 AM [Apache] Status change detected: running 8:54:06 AM [mysql] Attempting to start MySQL app... 8:54:06 AM [mysql] Status change detected: running </pre>	Service	Module	PID(s)	Port(s)	Actions	Apache		30148 24152	80, 443	Stop Admin Config Logs	MySQL		18976	3306	Stop Admin Config Logs	FileZilla				Start Admin Config Logs	Mercury				Start Admin Config Logs	Tomcat				Start Admin Config Logs
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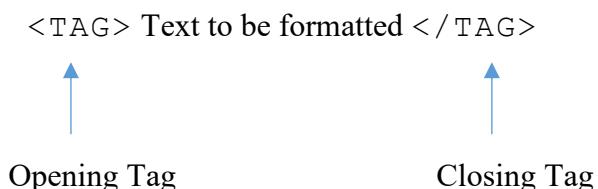
Index of /dasarWeb				
	Name	Last modified	Size	Description
	Parent Directory		-	
	buatForm.html	2025-08-29 14:24	1.9K	
	buatTabel.html	2025-08-29 12:47	634	
	bunga2.jpeg	2025-08-29 10:26	26K	
	font.html	2025-08-29 09:46	393	
	gambar.html	2025-08-29 10:37	768	
	garishorizontal.html	2025-08-29 09:56	1.8K	
	heading.html	2025-08-29 09:27	235	
	headingAlign.html	2025-08-29 09:32	277	
	hello.html	2025-08-29 09:26	213	
	img/	2025-08-29 10:30	-	
	karakter.html	2025-08-29 09:52	240	
	list.html	2025-08-29 09:59	540	
	macamLink.html	2025-08-29 11:13	6.0K	
	paragraf.html	2025-08-29 09:34	220	
	paragrafAlign.html	2025-08-29 09:37	332	
	warna.html	2025-08-29 10:09	354	

Apache/2.4.58 (Win64) OpenSSL/3.1.3 PHP/8.2.12 Server at localhost Port 80

For this course practicum, I used XAMPP because I had already used the application in other courses in the previous semester. Also the files above are the results of the practicum that has been carried out.

4	After completing the Laragon installation, proceed to Practical Section 2: Starting HTML.
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HTML is the standard format used to create web page documents. An HTML document has paired syntax called TAGs that are used to apply the desired effects. Generally, the format of a TAG is as follows:



Basic Structure of an HTML Page

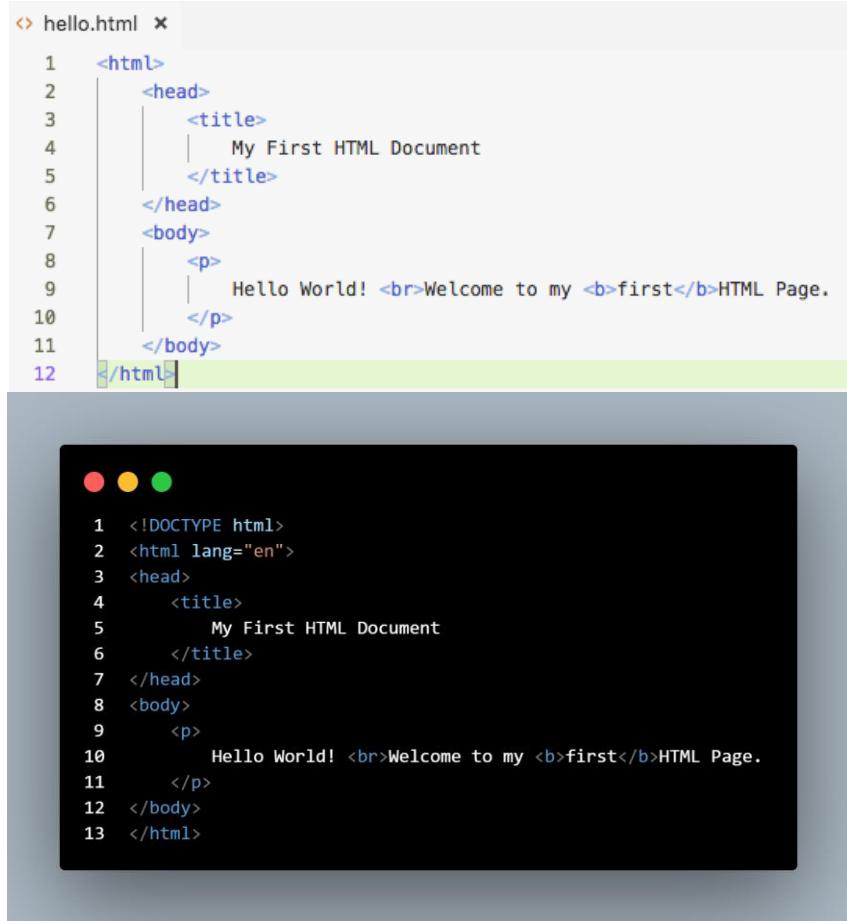
Every HTML document must start with the `<html>` tag and end with its complement, the `</html>` tag. An HTML document also includes three pairs of tags:

- `<head>` and `</head>`: Used to declare information about the HTML document.
- `<title>` and `</title>`: Used to add the title in the browser's title bar.
- `<body>` and `</body>`: Used to enclose all the text on the HTML page.

In HTML5, the structure is more concise, as shown below:

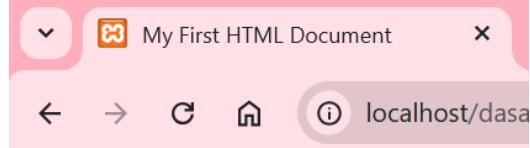
```
<!DOCTYPE html>
<html lang="en">
  <head>
    <!-- This is a comment line, it is not processed. -->
    <title>Document Title in HTML5</title>
  </head>
  <body>
    This is body content
  </body>
</html>
```

Practical Section 2: Starting HTML

Steps	Description
1	Open the Laragon folder in the directory where you installed Laragon. Navigate to the directory <code>C:\laragon\www</code> , and then create a new folder named <code>dasarWeb</code> .
2	Next, open your text editor, create a new file named <code>hello.html</code> , and save it in the <code>dasarWeb</code> directory that you just created.
	 <pre> <html> <head> <title> My First HTML Document </title> </head> <body> <p> Hello World!
Welcome to my firstHTML Page. </p> </body> </html> </pre>
3	Open your browser and type the following address: <code>localhost/dasarWeb/hello.html</code> .
4	Observe what appears in the browser.  <p>Hello World! Welcome to my firstHTML Page.</p>
5	<p>Record your observations (question No. 2) and write your answer below.</p> <p>All of the content on the above web page is contained within the <code><html></code> tag, as shown in the program code above. The <code><head></code> section, which contains the web page title “My First HTML Document,” appears in the browser tab. Then all content within the <code><body></code> tag, in the form of a paragraph, uses the <code><p></code> tag, which displays the text Hello World!, followed by a new line, using <code>
</code>, and the text Welcome to my first HTML page, where the word first is bolded using the <code></code> tag. All content successfully appears on the web page display.</p>

Remove the `
` tag from the code, observe the difference, and describe below what the function of the `
` tag is. (question No. 3) Write your answer below.

6



My First HTML Document

localhost/dasa

Hello World! Welcome to my **firstHTML** Page.

The `
` tag functions as a line break, similar to the Enter key on a keyboard. Without `
`, the browser will display the text horizontally in a single line. Therefore, this tag is important for formatting the layout of text in a paragraph `<p>`.

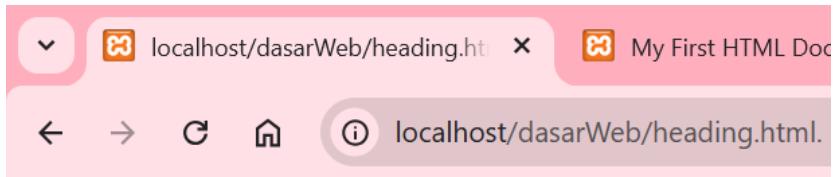
Practical Section 3: Text Formatting

HTML provides a variety of elements that can be used for text formatting.

❖ *Heading*

A heading is one of the essential elements in an HTML document. A heading is defined using the `<hn>` tag and is closed with the `</hn>` tag, where *n* represents the type, with values ranging from 1 to 6.

Step s	Description
1	Create a file named <code>heading.html</code> and save it in the <code>dasarWeb</code> folder that you created in Practical Section 2.
2	Type the following code into <code>heading.html</code>
	 <pre><> heading.html *</pre> <pre>1 <html> 2 <body> 3 <h1>Heading 1</h1> 4 <h2>Heading 2</h2> 5 <h3>Heading 3</h3> 6 <h4>Heading 4</h4> 7 <h5>Heading 5</h5> 8 <h6>Heading 6</h6> 9 </body> 10 </html></pre>
	 <pre>1 <!DOCTYPE html> 2 <html lang="en"> 3 <body> 4 <h1>Heading 1</h1> 5 <h2>Heading 2</h2> 6 <h3>Heading 3</h3> 7 <h4>Heading 4</h4> 8 <h5>Heading 5</h5> 9 <h6>Heading 6</h6> 10 </body> 11 </html></pre>
3	Open your browser and type the following address: localhost/dasarWeb/heading.html .
4	Observe what appears in the browser.



Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

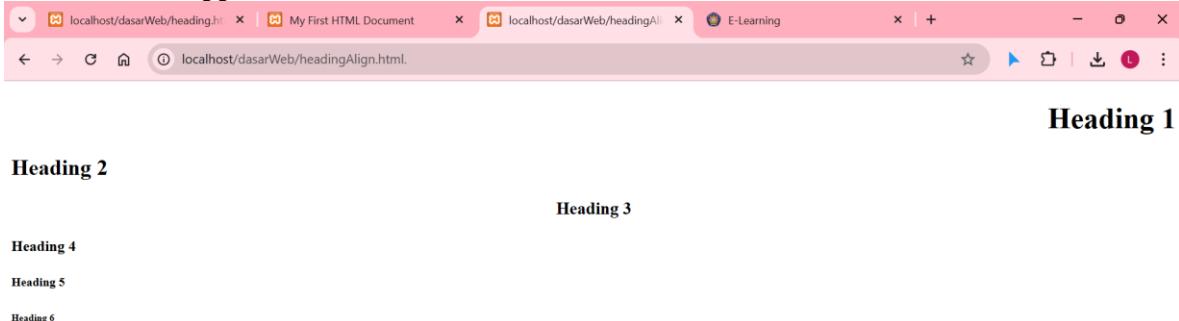
Heading 6

5 Record your observations (question No. 4) and write your answer below.
<h1> to <h6> are heading tags, used to define different levels of headings in an HTML document. When rendered in a browser, Heading 1 displayed in the largest and boldest font, Heading 2 slightly smaller, and so on, until Heading 6 which will appear in the smallest font among the headings.

6 Add the align attribute within the heading tag as shown below and save the file as [headingAlign.html](#).

```
<html>
  <body>
    <h1 align="right">Heading 1</h1>
    <h2 align="left">Heading 2</h2>
    <h3 align="center">Heading 3</h3>
    <h4>Heading 4</h4>
    <h5>Heading 5</h5>
    <h6>Heading 6</h6>
  </body>
</html>
```

```
● ● ●
1  <!DOCTYPE html>
2  <html lang="en">
3    <body>
4      <h1 align="right">Heading 1</h1>
5      <h2 align="left">Heading 2</h2>
6      <h3 align="center">Heading 3</h3>
7      <h4>Heading 4</h4>
8      <h5>Heading 5</h5>
9      <h6>Heading 6</h6>
10    </body>
11  </html>
```

8	<p>Open your browser and type the following address: localhost/dasarWeb/headingAlign.html.</p>						
9	<p>Observe what appears in the browser.</p>  <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: right;">Heading 1</td> </tr> <tr> <td>Heading 2</td> </tr> <tr> <td style="text-align: center;">Heading 3</td> </tr> <tr> <td>Heading 4</td> </tr> <tr> <td>Heading 5</td> </tr> <tr> <td>Heading 6</td> </tr> </table>	Heading 1	Heading 2	Heading 3	Heading 4	Heading 5	Heading 6
Heading 1							
Heading 2							
Heading 3							
Heading 4							
Heading 5							
Heading 6							
10	<p>Record your observations (question No. 5) and write your answer below. The align="right" attribute tells the browser to align this heading to the right side of its container. Heading 1 appear on the far right of the browser window.</p> <p>The align="left" attribute explicitly tells the browser to align this heading to the left side. Heading 2 appear on the far left of the browser window.</p> <p>The align="center" attribute instructs the browser to center this heading horizontally within its container. Heading 3 appear centered horizontally in the browser window.</p> <p>These headings do not have an align attribute specified. By default, block-level elements like these will usually align to the left. Heading 4, Heading 5, and Heading 6 also appear on the far left of the browser window, below the previous headings, because the default alignment is left.</p>						

❖ Paragraph

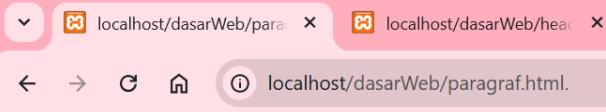
Like regular text, an HTML document can consist of a collection of paragraphs. In the context of HTML, a paragraph is represented by the `<p>` tag. The `<p>` tag is actually a paired tag, although in practice, the closing tag is often omitted.

Steps	Description
1	<p>Buat sebuah file bernama paragraf.html dan simpan file tersebut di dalam folder dasarWeb yang telah dibuat pada Praktikum 2.</p>
2	<p>Ketikkan kode di bawah ini dalam paragraf.html</p>
3	<pre><!DOCTYPE html> <html lang="en"> <body> <p> First paragraph </p> <p> This is the second paragraph </p> <p> And this is the third paragraph </p> </body> </html></pre>

```

1 <!DOCTYPE html>
2 <html lang="en">
3 <body>
4   <p>
5     First paragraph
6   </p>
7   <p>
8     This is the second paragraph
9   </p>
10  <p>
11    And this is the third paragraph
12  </p>
13 </body>
14 </html>

```

4	Open your browser and type the following address: localhost/dasarWeb/paragraf.html .
5	Observe what appears in the browser.  <p>First paragraph This is the second paragraph And this is the third paragraph</p>
6	Record your observations (question No. 6) and write your answer below.
6	the <p> tag is used to structure blocks of text, ensuring each paragraph gets its own line and proper separation without needing tags. When code above is displayed in a web browser, three distinct lines of text, each separated by a small vertical space.
7	To adjust the paragraph alignment, use the align attribute within the paragraph tag.
8	Add the align attribute in the paragraph tag as shown below and save the file as paragrafAlign.html .
9	<pre> <!DOCTYPE html> <html lang="en"> <head> <title> Manage Paragraph </title> </head> <body> <p align="right"> First Paragraph </p> <p align="center"> This is the second paragraph </p> <p align="left"> And this is the third paragraph </p> </body> </html> </pre>

```

1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4     <title>
5         Manage Paragraph
6     </title>
7 </head>
8 <body>
9     <p align="right">
10        First Paragraph
11    </p>
12    <p align="center">
13        This is the second paragraph
14    </p>
15    <p align="left">
16        And this is the third paragraph
17    </p>
18 </body>
19 </html>

```

10	Open your browser and type the following address: localhost/dasarWeb/paragrafAlign.html .
11	Observe what appears in the browser.  <p>The browser window shows the following content:</p> <pre>First Paragraph This is the second paragraph And this is the third paragraph</pre>
12	Record your observations (question No. 7) and write your answer below. The code <title>Manage Paragraph</title> tag ensures that "Manage Paragraph" appears as the page title. Inside the <body>, three paragraphs (<p>) are used, the first paragraph is aligned to the right (align="right"), the second is centered (align="center"), and the third is aligned to the left (align="left").

❖ Font

HTML provides several elements that can be used to manage fonts, such as **bold**, *italic*, underline, and many more. Additionally, this section will explain how to print tags. As you may know, the <p> tag in a document is automatically interpreted as a paragraph. However, to display the <p> character on the screen, we need to use entity names.

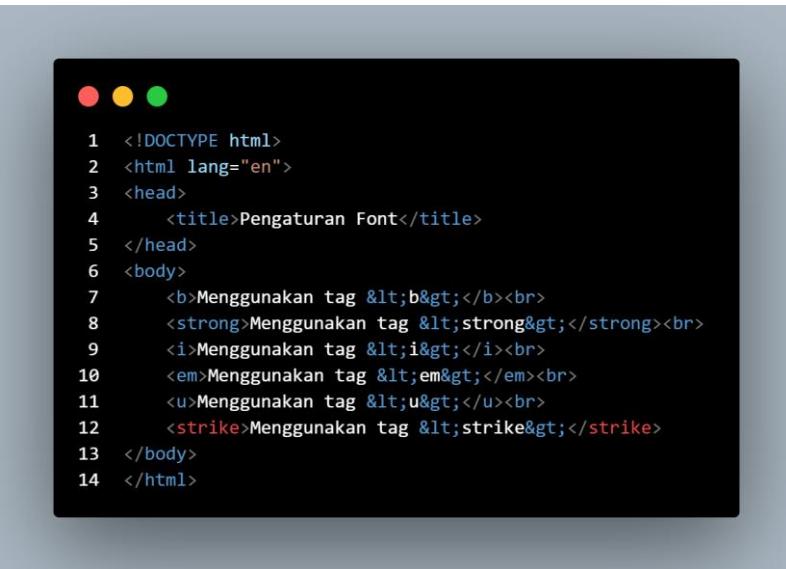
For example, the < character is represented by the entity name <, and the > character is represented by >.

Practical Section 4 : Font

Steps	Description
1	Create a file named font.html and save it in the dasarWeb folder that you created in Practical Section 2.
2	Type the following code into font.html :

3

```
font.html x
1 <html>
2   <head>
3     <title>Pengaturan Font</title>
4   </head>
5   <body>
6     <b>Menggunakan tag &lt;b&gt;</b><br>
7     <strong>Menggunakan tag &lt;strong&gt;</strong><br>
8     <i>Menggunakan tag &lt;i&gt;</i><br>
9     <em>Menggunakan tag &lt;em&gt;</em><br>
10    <u>Menggunakan tag &lt;u&gt;</u><br>
11    <strike>Menggunakan tag &lt;strike&gt;</strike>
12  </body>
13 </html>
```

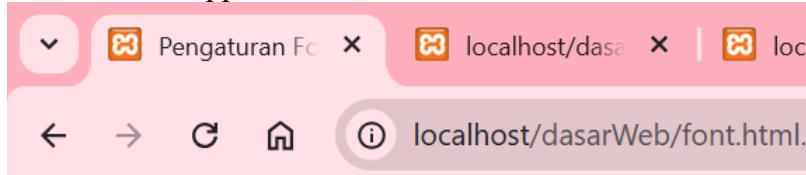


```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <title>PENGATURAN FONT</title>
5 </head>
6 <body>
7   <b>Menggunakan tag &lt;b&gt;</b><br>
8   <strong>Menggunakan tag &lt;strong&gt;</strong><br>
9   <i>Menggunakan tag &lt;i&gt;</i><br>
10  <em>Menggunakan tag &lt;em&gt;</em><br>
11  <u>Menggunakan tag &lt;u&gt;</u><br>
12  <strike>Menggunakan tag &lt;strike&gt;</strike>
13 </body>
14 </html>
```

4

Open your browser and type the following address: localhost/dasarWeb/font.html.

Observe what appears in the browser.



5

**Menggunakan tag **
**Menggunakan tag **
Menggunakan tag <i>
Menggunakan tag
Menggunakan tag <u>
~~Menggunakan tag <strike>~~

Record your observations (question No. 8) and write your answer below.

6

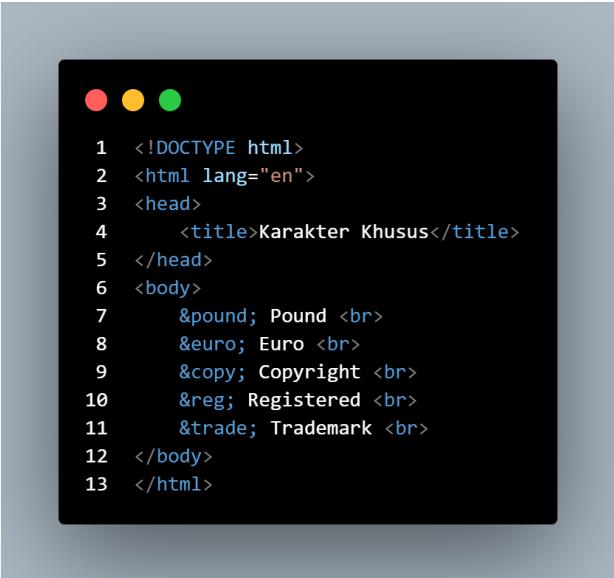
The codes above demonstrates how `` and `` make text bold, with `` implying importance, `<i>` and `` make text *italic*, with `` implying emphasis), `<u>` *underlines* text, and `<strike>` applies a `<strike>`strikethrough`</strike>` effect, and using `
` tags to place each example on a new line for clear visual separation.

❖ Special Characters

In HTML, we can also display special characters by using entity names. The table below shows some types of special characters that can be used along with their entity names.

Character	Description	Special Characters
¢	Cent	¢
£	Pound	£
¥	Yen	¥
€	Euro	€
©	Copyright	©
®	Registered	®
™	Trademark	™

Practical Section 5: Special Characters

Steps	Description
1	Create a file named <code>karakter.html</code> and save it in the dasarWeb folder that you created in Practical Section 2.
2	Type the following code into <code>karakter.html</code> :
3	<pre>↳ karakter.html × 1 <html> 2 <head> 3 <title>Karakter Khusus</title> 4 </head> 5 <body> 6 &pound; Pound
 7 &euro; Euro
 8 &copy; Copyright
 9 &reg; Registered
 10 &trade; Trademark
 11 </body> 12 </html></pre>
	 A screenshot of a terminal window on a Mac OS X system. The window title bar says "karakter.html". The terminal prompt is "↳". The code listed is identical to the one in step 3, with line numbers 1 through 12 visible on the left.
4	Open your browser and type the following address: <code>localhost/dasarWeb/karakter.html</code> .
5	Observe what appears in the browser.

	 <p>£ Pound € Euro © Copyright ® Registered ™ Trademark</p>
6	<p>Record your observations (question No. 9) and write your answer below.</p> <p>The <title>Karakter Khusus</title> tag sets "Karakter Khusus" as the page's title. Inside the <body>, it presents common symbols like &pound for Pound (£), &euro for Euro (€), &copy for Copyright (©), &reg for Registered (®), and &trade for Trademark (™), with each symbol and its corresponding label appearing on a new line thanks to the
 tag.</p>

Practical Section 6: Horizontal Line

In HTML, a horizontal line is represented by the <hr> tag. Although most browsers render this element with slightly different visualizations, it essentially represents a horizontal line.

Steps	Description
1	Buat sebuah file bernama garishorizontal.html dan simpan file tersebut di dalam folder dasarWeb yang telah dibuat pada Praktikum 2.
2	Ketikkan kode di bawah ini dalam garishorizontal.html
3	<pre><!DOCTYPE html> <html lang="en"> <head> <title> Create Horizontal Line </title> </head> <body> UNDANG-UNDANG DASAR NEGARA REPUBLIK INDONESIA TAHUN 1945 <hr> PEMBUKAAN
 Bawa sesungguhnya kemerdekaan itu ialah hak segala bangsa dan oleh sebab itu,
 maka penjajahan di atas dunia harus dihapuskan, karena tidak sesuai dengan peri-kemanusiaan dan peri-keadilan.
 Dan perjuangan pergerakan kemerdekaan Indonesia
 telah sampailah kepada saat yang membahagiakan dengan selamat sentusa
 mengantarkan rakyat Indonesia ke depan pintu gerbang kemerdekaan Negara Indonesia
 yang merdeka, bersatu, berdaulat, adil dan makmur.
 Atas berkat rakhmat Allah yang maha kuasa dan dengan didorongkan oleh keinginan luhur
 supaya berkehidupan kebangsaan yang bebas,
 maka rakyat Indonesia menyatakan dengan ini kemerdekaannya.
 Kemudian dari pada itu
 untuk membentuk suatu Pemerintah Negara Indonesia
 yang melindungi segenap bangsa Indonesia dan seluruh tumpah darah Indonesia
 dan untuk memajukan kesejahteraan umum, mencerdaskan kehidupan bangsa
 dan ikut melaksanakan ketertiban dunia yang berdasarkan kemerdekaan, perdamaian abadi dan keadilan sosial,
 maka disusunlah Kemerdekaan Kebangsaan Indonesia itu dalam suatu susunan Negara Republik Indonesia,
 yang berkeadaulatan rakyat dengan berdasar kepada:
 Ketuhanan Yang Maha Esa,
 Kemanusiaan yang adil dan beradab,
 persatuan Indonesia
 dan kerakyatan yang dipimpin oleh hikmat kebijaksanaan dalam permusyawaratan/perwakilan,
 serta dengan mewujudkan suatu keadilan sosial bagi seluruh rakyat Indonesia. </body> </html></pre>

```

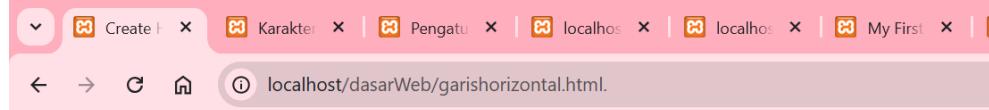
1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <title>
5          Create Horizontal Line
6      </title>
7  </head>
8  <body>
9      UNDANG-UNDANG DASAR NEGARA REPUBLIK INDONESIA TAHUN 1945 <hr>
10     PEMBUKAAN <br>
11     Bahwa sesungguhnya kemerdekaan itu ialah hak segala bangsa dan oleh sebab itu, <br>
12     maka penjajahan di atas dunia harus dihapuskan, karena tidak sesuai dengan peri-kemanusiaan dan peri-keadilan. <br>
13     Dan perjuangan pergerakan kemerdekaan Indonesia <br>
14     telah sampailah kepada saat yang membahagiakan dengan selamat sentausa <br>
15     mengantarkan rakyat Indonesia ke depan pintu gerbang kemerdekaan Negara Indonesia <br>
16     yang merdeka, bersatu, berdaulat, adil dan makmur. <br>
17     Atas berkat rakhmat Allah yang maha kuasa dan dengan didorongkan oleh keinginan luhur <br>
18     supaya berkehidupan kebangsaan yang bebas, <br>
19     maka rakyat Indonesia menyatakan dengan ini kemerdekaannya. <br>
20     Kemudian dari pada itu <br>
21     untuk membentuk suatu Pemerintah Negara Indonesia <br>
22     yang melindungi segenap bangsa Indonesia dan seluruh tumpah darah Indonesia <br>
23     dan untuk memajukan kesejahteraan umum, mencerdaskan kehidupan bangsa <br>
24     dan ikut melaksanakan ketertiban dunia yang berdasarkan kemerdekaan, perdamaian abadi dan keadilan sosial, <br>
25     maka disusunlah Kemerdekaan Kebangsaan Indonesia itu dalam suatu susunan Negara Republik Indonesia, <br>
26     yang berkedaulatan rakyat dengan berdasar kepada: <br>
27     Ketuhanan Yang Maha Esa, <br>
28     Kemanusiaan yang adil dan beradab, <br>
29     persatuan Indonesia <br>
30     dan kerakyatan yang dipimpin oleh hikmat kebijaksanaan dalam permusyawaratan/perwakilan, <br>
31     serta dengan mewujudkan suatu keadilan sosial bagi seluruh rakyat Indonesia.
32 </body>
33 </html>

```

4

Open your browser and type the following address:
localhost/dasarWeb/garishorizontal.html.

Observe what appears in the browser.



UNDANG-UNDANG DASAR NEGARA REPUBLIK INDONESIA TAHUN 1945

PEMBUKAAN

Bahwa sesungguhnya kemerdekaan itu ialah hak segala bangsa dan oleh sebab itu,
 maka penjajahan di atas dunia harus dihapuskan, karena tidak sesuai dengan peri-kemanusiaan dan peri-keadilan.

Dan perjuangan pergerakan kemerdekaan Indonesia
 telah sampailah kepada saat yang membahagiakan dengan selamat sentausa
 mengantarkan rakyat Indonesia ke depan pintu gerbang kemerdekaan Negara Indonesia
 yang merdeka, bersatu, berdaulat, adil dan makmur.

Atas berkat rakhmat Allah yang maha kuasa dan dengan didorongkan oleh keinginan luhur
 supaya berkehidupan kebangsaan yang bebas,
 maka rakyat Indonesia menyatakan dengan ini kemerdekaannya.

Kemudian dari pada itu
 untuk membentuk suatu Pemerintah Negara Indonesia
 yang melindungi segenap bangsa Indonesia dan seluruh tumpah darah Indonesia
 dan untuk memajukan kesejahteraan umum, mencerdaskan kehidupan bangsa
 dan ikut melaksanakan ketertiban dunia yang berdasarkan kemerdekaan, perdamaian abadi dan keadilan sosial,
 maka disusunlah Kemerdekaan Kebangsaan Indonesia itu dalam suatu susunan Negara Republik Indonesia,
 yang berkedaulatan rakyat dengan berdasar kepada:
 Ketuhanan Yang Maha Esa,
 Kemanusiaan yang adil dan beradab,
 persatuan Indonesia
 dan kerakyatan yang dipimpin oleh hikmat kebijaksanaan dalam permusyawaratan/perwakilan,
 serta dengan mewujudkan suatu keadilan sosial bagi seluruh rakyat Indonesia.

5

Record your observations (question No. 10) and write your answer below.

6

The HTML code displays the full text of the Preamble to the 1945 Constitution of the Republic of Indonesia, with the title "Create Horizontal Line" appearing in the browser tab. The <body>

contains the entire preamble, where
 tags are frequently used to create line breaks, ensuring each phrase or clause of the constitution appears on a new line for readability. This effectively formats a long legal text within a basic web page structure.

Practical Section 7: Using List

HTML supports lists in the form of ordered, unordered, and definition lists. For each of these types, there are list items represented by the and tags, which indicate the individual items within the list.

Steps	Description
1	Create a file named <code>list.html</code> and save it in the <code>dasarWeb</code> folder that you created in Practical Section 2.
2	Type the following code into <code>list.html</code> :
3	<pre> 1 <html> 2 <head> 3 <title>Bekerja dengan List</title> 4 </head> 5 <body> 6 Ordered List 7 8 satu 9 dua 10 tiga 11 12
 13 <hr> 14 Unordered List 15 16 satu 17 dua 18 tiga 19 20
 21 <hr> 22 Definition List 23 <dl> 24 <dt>satu</dt> 25 <dd>satu satu</dd> 26 <dd>satu dua</dd> 27 <dt>dua</dt> 28 <dd>dua dua</dd> 29 </dl> 30 </body> 31 </html></pre>

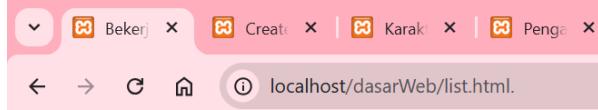
```

1  <!DOCTYPE html>
2  <html lang="en">
3  <head>
4      <title>Bekerja dengan List</title>
5  </head>
6  <body>
7      Ordered List
8      <ol>
9          <li>satu</li>
10         <li>dua</li>
11         <li>tiga</li>
12     </ol>
13     <br>
14     <hr>
15     Unordered List
16     <ul>
17         <li>satu</li>
18         <li>dua</li>
19         <li>tiga</li>
20     </ul>
21     <br>
22     <hr>
23     Definition List
24     <dl>
25         <dt>satu</dt>
26         <dd>satu satu</dd>
27         <dd>satu dua</dd>
28         <dt>dua</dt>
29         <dd>dua dua</dd>
30     </dl>
31 </body>
32 </html>

```

4 Open your browser and type the following address: localhost/dasarWeb/list.html.

Observe what appears in the browser.



Ordered List

- 1. satu
- 2. dua
- 3. tiga

Unordered List

- satu
- dua
- tiga

Definition List

satu	satu
	satu dua
dua	dua
	dua dua

5

Record your observations (question No. 11) and write your answer below.

The HTML code, titled "Bekerja dengan List" in the browser tab, demonstrates three common types of HTML lists within the <body>. It first presents an Ordered List () with items

6

"satu" (one), "dua" (two), and "tiga" (three), which will display with numbers. Next, after a line break (`
`) and a horizontal rule (`<hr>`), an Unordered List (``) follows, showing the same items, but this time with bullet points. Finally, after another line break and horizontal rule, a Definition List (`<dl>`) is created, featuring "satu" (one) and "dua" (two) as definition terms (`<dt>`), each followed by their respective definitions "satu satu", "satu dua" and "dua dua" (`<dd>`).

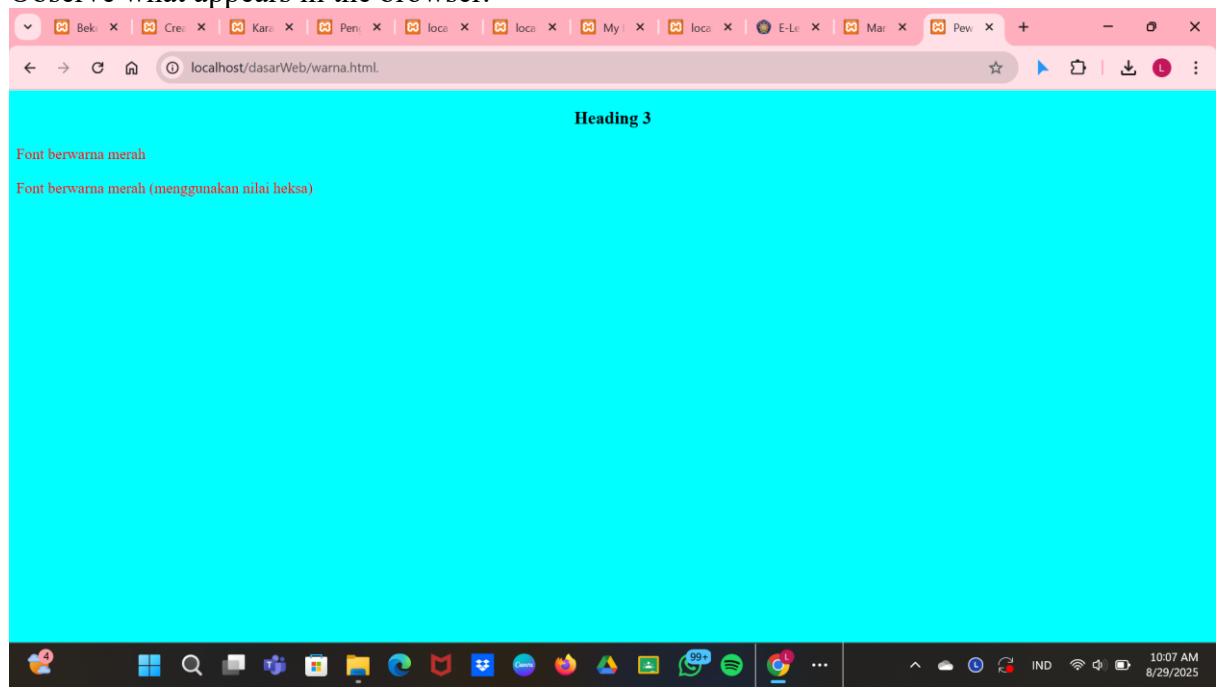
Practical Section 8: Coloring

To set a background color, HTML provides the `bgcolor` attribute in the `<body>` tag. This attribute can be filled with a color name (e.g., red) or a hexadecimal code (e.g., #FFFFFF).

For certain other elements, the `color` attribute is available to apply coloring. Similar to `bgcolor`, the value of this attribute can also be a color name or a hexadecimal code.

Steps	Description
1	Create a file named <code>warna.html</code> and save it in the <code>dasarWeb</code> folder that you created in Practical Section 2.
2	Type the following code into <code>warna.html</code>
3	<pre> <> warna.html ✘ 1 <html> 2 <!-- Memberi warna aqua di body --> 3 <head> 4 <title> 5 Pewarnaan 6 </title> 7 </head> 8 <body bgcolor="aqua"> 9 <h3 align="center">Heading 3</h3> 10 Font berwarna merah

 11 Font berwarna merah (menggunakan nilai heksa) 12 </body> 13 </html> 14 15 </pre>
4	 <p>Open your browser and type the following address: <code>localhost/dasarWeb/warna.html</code>.</p>

5	<p>Observe what appears in the browser.</p> 
6	<p>Record your observations (question No. 12) and write your answer below.</p> <p>The HTML code demonstrates color styling on a webpage, titled "Pewarnaan" in the browser tab. The <code><body></code> has its background color set to aqua using <code>bgcolor="aqua"</code>, and it includes a comment explaining this. Inside the body, there's a centered <code><h3>Heading 3</h3></code>. Below this, two lines of text are displayed using the <code></code> tag: one shows "Font berwarna merah in red using <code>color="red"</code>", and the other displays the same text but uses the hexadecimal color value <code>color="#FF0000"</code> for red, illustrating different ways to apply text colors.</p>

Practical Section 9: Working with Images

An HTML document can contain graphics in addition to text. HTML offers the `` tag, which is supported by several attributes, for this purpose.

Steps	Description
1	Place an image in the <code>dasarWeb</code> folder with any size and name the image <code>bunga2</code> . If the image is in JPG format, the name should be <code>bunga2.jpg</code> (the file can be in a format other than JPG).
2	Create a new folder inside the <code>dasarWeb</code> folder and name it <code>img</code> .
3	Place a different image with any size in the <code>img</code> folder and name it <code>bunga1</code> . If the file is in JPG format, the name should be <code>bunga1.jpg</code> (the file can be in a format other than JPG).
4	Create a file named <code>gambar.html</code> and save it in the <code>dasarWeb</code> folder that you created in Practical Section 2.
5	Type the following code into <code>gambar.html</code> :

6

```

<-- gambar.html x
1 <html>
2   <head>
3     <title>
4       Bekerja dengan gambar
5     </title>
6   </head>
7   <body>
8     <p>
9       <!-- Menggunakan Path Relative -->
10      
11      Vivamus sem nibh, fermentum a dolor maximus, maximus feugiat nibh.
12      Duis vel condimentum lacus. Integer euismod ligula vel turpis auctor,
13      a malesuada diam interdum.
14      <br>
15      <hr>
16    </p>
17    <p>
18      <!-- Menggunakan Path Absolute -->
19      
20      Vivamus sem nibh, fermentum a dolor maximus, maximus feugiat nibh.
21      Duis vel condimentum lacus. Integer euismod ligula vel turpis auctor,
22      a malesuada diam interdum.
23    </p>
24  </body>
25 </html>
```



```

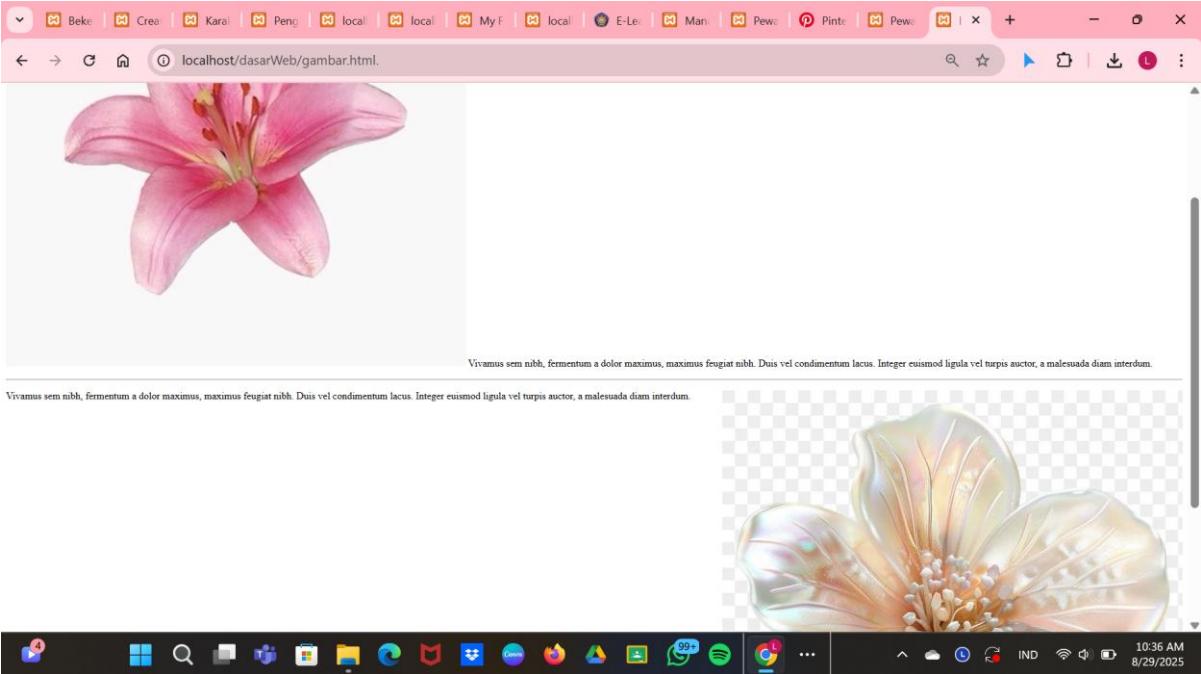
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <title>
5     Bekerja dengan gambar
6   </title>
7 </head>
8 <body>
9   <p>
10     <!-- Menggunakan Path Relative -->
11     
12     Vivamus sem nibh, fermentum a dolor maximus, maximus feugiat nibh.
13     Duis vel condimentum lacus. Integer euismod ligula vel turpis auctor,
14     a malesuada diam interdum.
15     <br>
16     <hr>
17   </p>
18   <p>
19     <!-- Menggunakan Path Absolute -->
20     
21     Vivamus sem nibh, fermentum a dolor maximus, maximus feugiat nibh.
22     Duis vel condimentum lacus. Integer euismod ligula vel turpis auctor,
23     a malesuada diam interdum.
24   </p>
25 </body>
26 </html>
```

7

Open your browser and type the following address: localhost/dasarWeb/warna.html.

8

Observe what appears in the browser.

	
9	<p>Record your observations on the two methods of displaying images on the webpage (question No. 13) and write your answer below.</p> <p>The HTML code, titled "Bekerja dengan gambar" in the browser tab, demonstrates how to display images using both relative and absolute file paths. The <code><body></code> section first shows an image loaded with a relative path (<code></code>), meaning the browser looks for "bunga2.jpeg" in the same folder as the HTML file, followed by some placeholder text. After a line break (<code>
</code>) and a horizontal rule (<code><hr></code>), a second image is displayed using an absolute path (<code></code>), indicating a specific location in the file system relative to the web server's root, and this image is aligned to the right, followed by more text.</p>

Practical Section 10 : Link

- A link in HTML is called a Hyperlink.
- A Hyperlink is an element, text, or an image that can be clicked to navigate to another document.
- The browser will highlight text or images identified as links with a color and/or underline to indicate that it is a hypertext link (hyperlink or link).
- The syntax for a link in HTML:

The `<a>` (Anchor) tag is used to create a link to another document by adding the `href` attribute, which defines the link's destination.

`linked text`

- The `href` attribute provides the link's destination address.
- The linked `text` is the text that will appear on the webpage containing the link, and when clicked, it will navigate to the address specified in the `href` attribute.
- Example: `Click to go to Polinema`

- Types of Links

- a) **Relative Link**

A local link that points to a location within the same website, specified by a URL (without `https://www.`).

- b) **Absolute Link**

Used to create a link to a webpage on another website on the internet.

- c) **Link within the Same Document**

This type of link is used for long documents that, when displayed in a web browser, require the user to scroll repeatedly. Navigation within the document can be simplified by creating links between sections, with each section being marked with a name. This allows a link to be placed elsewhere in the document to jump to that specific section.

Steps to name a section within a document:

- Place the cursor at the line or text that will mark the beginning of the section.
- Insert the name of the section with: ``.
- Creating a link to the same document can be done similarly to absolute or relative links, but the document's name in the link is replaced with the section name, prefixed by #. Example: `Section about link`.

Practical Steps:

Step s	Description
1	Create a file named <code>macamLink.html</code> and save it in the <code>dasarWeb</code> folder that you created in Practical Section 2.
2	Type the following code into <code>macamLink.html</code> :
3	<pre> 1 <html> 2 <title>Membuat Link</title> 3 <head> 4 5 </head> 6 <body> 7 8 <h4>Macam-macam Link</h4> 9 Link Relatif
 10 Link Absolut
 11 Link with New Window
 12 Link Ke Email 13 14

 15

 16

 17

 18

 19

 20

 21

 22

 23

 24

 25

 26

 27

 28 29 30 <h1>Ini adalah contoh Link Relatif</h1> 31 <p> 32 Klik di sini Jika Anda ingin menuju ke halaman berikutnya.

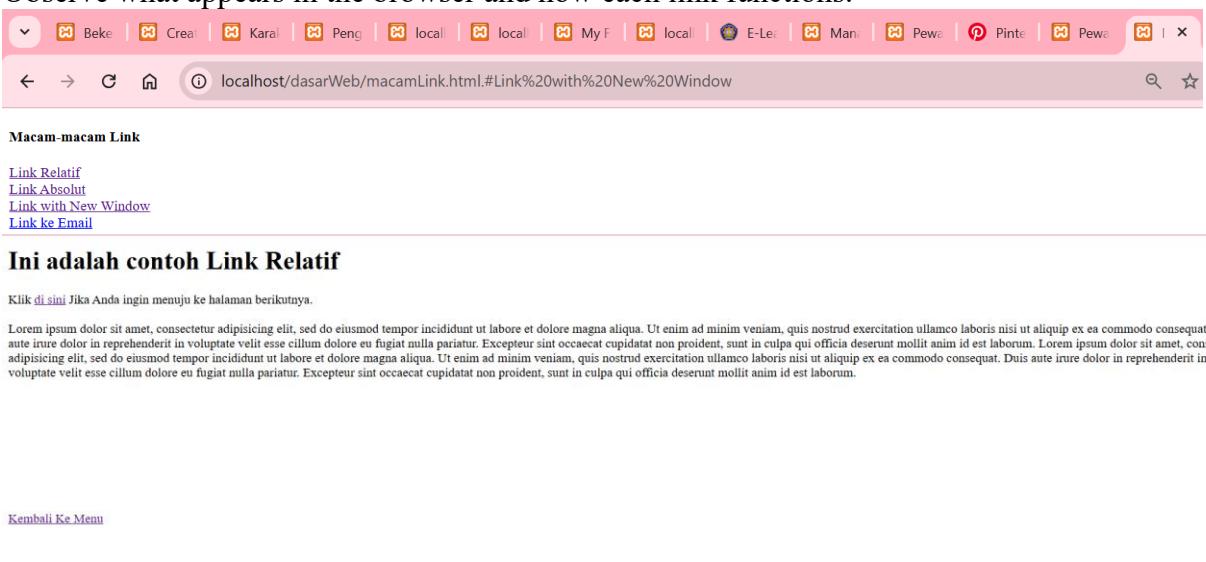
 33 Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut 34 labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris 35 nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse </pre>

```

35     nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
36     cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
37     qui officia deserunt mollit anim id est laborum.
38     Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
39     labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
40     nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
41     cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
42     qui officia deserunt mollit anim id est laborum.<br><br><br><br>
43     <a href="#TOP">Kembali Ke Menu</a>
44   </p>
45 </a><br><br>
46 <a name="Link Absolut">
47   <h1>Ini adalah contoh Link Absolut</h1>
48   <p>
49     Klik <a href="http://www.google.com">di sini</a> untuk pencarian yang Anda inginkan.<br><br>
50     Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
51     labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
52     nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
53     cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
54     qui officia deserunt mollit anim id est laborum.
55     Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
56     labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
57     nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
58     cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
59     qui officia deserunt mollit anim id est laborum.<br><br><br><br><br>
60     <a href="#TOP">Kembali Ke Menu</a>
61   </p>
62 </a>
63 <br><br>
64 <a name="Link with New Window">
65   <h1>Ini adalah contoh Link dengan Window Baru</h1>
66   <p>
67     Buka <a href="http://www.google.com" target="_blank">www.google.com</a> di halaman baru.<br><br>
68     Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
69     labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
70     nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
71     cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
72     qui officia deserunt mollit anim id est laborum.
73     Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
74     labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
75     nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
76     cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
77     qui officia deserunt mollit anim id est laborum.<br><br><br><br><br>
78     <a href="#TOP">Kembali Ke Menu</a><br><br><br><br><br><br>
79   </p>
80 </a>
81 <a name="Link ke Email">
82   <h1>Ini adalah contoh link ke email</h1>
83   <p>
84     Anda bisa menghubungi saya di <a href = "mailto:dyah.ayu@polinema.ac.id">email ini</a>
85     untuk pertanyaan lebih lanjut.<br><br>
86     Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
87     labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
88     nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
89     cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
90     qui officia deserunt mollit anim id est laborum.
91     Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
92     labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
93     nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
94     cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
95     qui officia deserunt mollit anim id est laborum.
96     </p>
97   </a>
98 <br><br>
99 <a href="#TOP">Kembali Ke Atas</a>
100 </body>
101 </html>

```

```
1  <!DOCTYPE html>
2  <html lang="en">
3      <title>Membuat Link</title>
4  <head>
5
6  </head>
7  <body>
8      <a name="TOP">
9          <h4>Macam-macam Link</h4>
10         <a href="#">Link Relatif</a><br>
11         <a href="#">Link Absolut</a><br>
12         <a href="#">Link with New Window</a><br>
13         <a href="#">Link ke Email</a>
14     </a>
15     <br><br><br><br>
16     <br><br><br><br>
17     <br><br><br><br>
18     <br><br><br><br>
19     <br><br><br><br>
20     <br><br><br><br>
21     <br><br><br><br>
22     <br><br><br><br>
23     <br><br><br><br>
24     <br><br><br><br>
25     <br><br><br><br>
26     <br><br><br><br>
27     <br><br><br><br>
28     <br><br><br><br>
29
30     <a name="Link Relatif">
31         <h1>Ini adalah contoh Link Relatif</h1>
32     <p>
33         Klik <a href="gambar.html">di sini</a> Jika Anda ingin menuju ke halaman berikutnya.<br><br>
34         Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
35         labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
36         nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
37         cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
38         qui officia deserunt mollit anim id est laborum.
39         Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
40         labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
41         nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
42         cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
43         qui officia deserunt mollit anim id est laborum.<br><br><br><br><br>
44         <a href="#TOP">Kembali Ke Menu</a>
45     </p>
46     </a><br><br>
47     <a name="Link Absolut">
48         <h1>Ini adalah contoh Link Absolut</h1>
49     <p>
50         Klik <a href="http://www.google.com">di sini</a> untuk pencarian yang Anda inginkan.<br><br>
51         Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
52         labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
53         nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
54         cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
55         qui officia deserunt mollit anim id est laborum.
56         Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
57         labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
58         nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
59         cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
60         qui officia deserunt mollit anim id est laborum.<br><br><br><br><br>
61         <a href="#TOP">Kembali Ke Menu</a>
62     </p>
63     </a>
64     <br><br>
65     <a name="Link with New Window">
66         <h1>Ini adalah contoh Link dengan Window Baru</h1>
67     <p>
68         Buka <a href="http://www.google.com" target="_blank">www.google.com</a> di halaman baru.<br><br>
69         Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
70         labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
71         nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
72         cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
73         qui officia deserunt mollit anim id est laborum.
74         Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
75         labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
76         nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
77         cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
78         qui officia deserunt mollit anim id est laborum.<br><br><br><br><br>
79         <br>
80         <a href="#TOP">Kembali ke Menu</a><br><br><br><br><br><br>
81     </p>
82     </a>
83     <br>
84     <a name="Link ke Email">
85         <h1>Ini adalah contoh link ke Email</h1>
86     <p>
87         Anda bisa menghubungi saya di <a href="mailto:dyah.ayu@polinema.ac.id">email ini</a>
88         untuk pertanyaan lebih lanjut.<br><br>
89         Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
90         labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
91         nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
92         cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
93         qui officia deserunt mollit anim id est laborum.
94         Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
95         labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
96         nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
97         cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
98         qui officia deserunt mollit anim id est laborum.
99         </p>
100        </a>
101        <br><br>
102        <a href="#TOP">Kembali Ke Atas</a>
103    </body>
104 </html>
```

4	<p>Open your browser and type the following address: localhost/dasarWeb/macamLink.html.</p>
	<p>Observe what appears in the browser and how each link functions.</p>  <p>Macam-macam Link</p> <ul style="list-style-type: none"> Link Relatif Link Absolut Link with New Window Link ke Email <p>Ini adalah contoh Link Relatif</p> <p>Klik di sini Jika Anda ingin menuju ke halaman berikutnya.</p> <p>Lore ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. Lore ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.</p> <p>Kembali Ke Menu</p>
5	<p>Ini adalah contoh Link Absolut</p> <p>Klik di sini untuk pencarian yang Anda inginkan.</p> <p>Lore ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. Lore ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.</p> <p>Kembali Ke Menu</p>
	<p>Ini adalah contoh Link dengan Window Baru</p> <p>Buka www.google.com di halaman baru.</p> <p>Lore ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis au reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. Lore ipsum dolor sit amet, consectetur adipisicing elit, sed tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.</p> <p>Kembali ke Menu</p>
6	<p>Ini adalah contoh link ke Email</p> <p>Anda bisa menghubungi saya di email@ini untuk pertanyaan lebih lanjut.</p> <p>Lore ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis au reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. Lore ipsum dolor sit amet, consectetur adipisicing elit, sed tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.</p> <p>Kembali Ke Atas</p>
	<p>Record your observations (question No. 14) and write your answer below.</p> <p>When viewed in a browser, this document first displays an "Index Macam-macam Link" listing four types: Relative, Absolute, Link New Window, and Link to Email, each serving as a clickable jump link within the page. Below the index, dedicated sections for each link type appear. A Relative Link (<code>href="gambar.html"</code>) will navigate the user to another page within the same website (e.g., <code>gambar.html</code>) when clicked. An Absolute Link (<code>href="http://www.google.com"</code>) will direct the user to an external website (like Google) in the <i>same browser tab</i>. A Link with New Window (<code>href="http://www.google.com" target="_blank"</code>) will open the specified external website (e.g., Google) in a brand new browser tab or window. Finally, an Email Link (<code>href="mailto:email@example.com"</code>) will automatically open the user's default email client, pre-filled with the specified email address in the "To" field. The "Kembali Ke Menu" links at the end of each section, and "Kembali Ke Atas" at the very bottom, allow users to navigate back to the top of the page using named anchors, enhancing internal navigation.</p>

Practical Task Section 10: Links

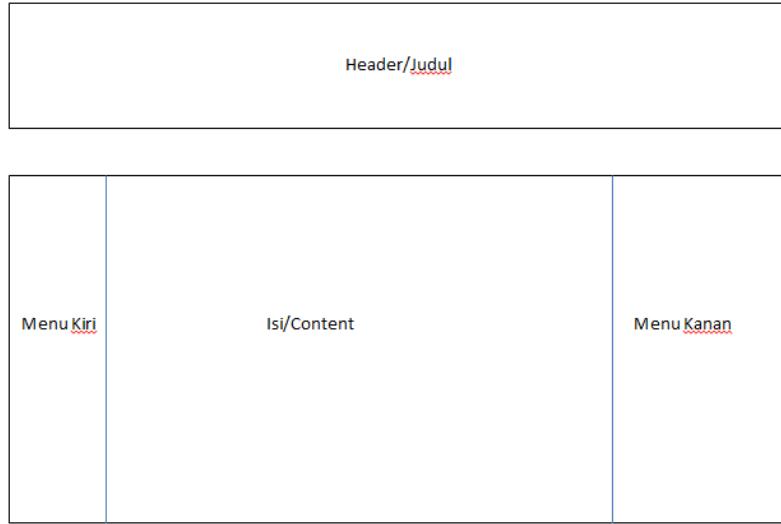
Create a webpage and name it `tugasLink.html`.

Display an image that contains a link to <https://www.google.com>

Practical Section 11 : Table and Table Formatting

In a webpage, tables serve as a framework for organizing the content components, ensuring that the content is arranged neatly within the webpage.

Here is an example of a table structure design:



Picture 6. Example of a Table in a Web Page

❖ Creating Table

Creating a table in HTML begins with the `<table>` tag and ends with the `</table>` tag.

- `<table>`: This tag informs the browser that it is a table.
- `<tr>`: Table Row tag, used to create a row within the table.
- `<td>`: Table Data tag, used to place the data that you want to include in the table. The `<td>` can also be understood as a column.

The structure of a table is illustrated in Figure 7.

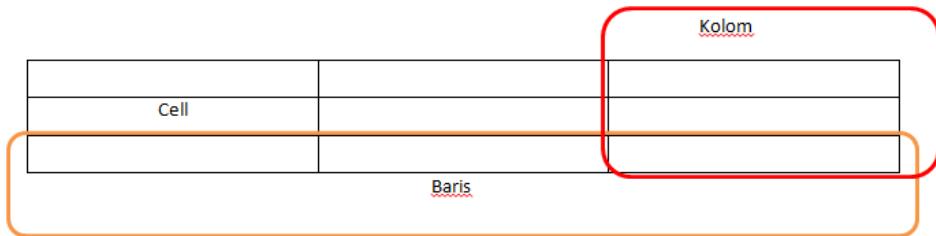


Figure 7. Table Structure

The syntax for creating a table is as follows:

```
<table attribue="value">
<thead>
  <tr>
    <th attribue="value"> Header Content </th>
    <th attribue="value"> Header Content </th>
  </tr>
</thead>
<tbody>
```

```

<tr>
    <td attribue="value"> Body Content </td>
    <td attribue="value"> Body Content </td>
</tr>
</tbody>
</table>

```

❖ Table Configuration

Here are the attributes that can be used for table and row configuration.

- Attributes for Table

Attribute	Description
align	Used to align the table to the left, center, right, or justify it.
border	Used to set the thickness of the border lines between cells in the table.
width	Used to specify the width of the table; you can set the table width using a percentage (%).
cellspacing	Used to define the space (padding) between cells and between the cells and the border.
cellpadding	Defines the space (padding) between the content of the cell and the cell's border.
bgcolor	Specifies the background color for all cells in the table.
bordercolor	Used to set the color of the border lines.

- Attributes for Table Row

Attribute	Description
align	Used to align the table to the left, center, right, or justify it.
valign	Used for vertical alignment; valign can be set to values such as top (top of the page), center (middle of the page), bottom (bottom of the page), or baseline (standard).
bgcolor	Indicates the background color for the row.

❖ Merger Cell

Table cell merging can be achieved using the following attributes:

- Rowspan: Used to merge cells across multiple rows. For example, to merge three rows, you would set `rowspan="3"`.
- Colspan: Used to merge cells across multiple columns. For example, to merge three columns, you would set `colspan="3"`.

Practical Steps:

Steps	Description
1	Create a file named <code>buatTabel.html</code> and save it in the <code>dasarWeb</code> folder that you created in Practical Section 2.
2	Type the following code into <code>buatTabel.html</code>

```

batTabel.html ✘
1 <html>
2   <head>
3     <title>
4       Membuat tabel
5     </title>
6   </head>
7   <body>
8     <table>
9       <tr>
10      <td>ini baris pertama kolom pertama</td>
11      <td>ini baris pertama kolom kedua</td>
12    </tr>
13  </table>
14 </body>
15 </html>

```

3

```

<!DOCTYPE html>
<html lang="en">
<head>
  <title>
    Membuat Tabel
  </title>
</head>
<body>
  <table>
    <tr>
      <td>ini baris pertama kolom pertama</td>
      <td>ini baris pertama kolom kedua</td>
    </tr>
  </table>
</body>
</html>

```

4

Open your browser and type the following address: localhost/dasarWeb/buatTabel.html.

Observe what appears in the browser.



5

ini baris pertama kolom pertama ini baris pertama kolom kedua

Record your observations (question No. 15) and write your answer below.

The HTML code creates a simple webpage titled "Membuat Tabel" (Creating a Table) in the browser tab. The `<body>` contains a basic table (`<table>`) with one row (`<tr>`). Inside this row, there are two table data cells (`<td>`), displaying "ini baris pertama kolom pertama" (this is the first row first column) and "ini baris pertama kolom kedua" (this is the first row second column) respectively. When rendered, the browser will show a small, unbordered table with these two pieces of text side-by-side in a single row.

6

7 Add the attribute `border="1"` to the `<table>` tag. Save the file and run it again in the browser at localhost/dasarWeb/buatTabel.html.

```

1 <table border="1">
2   <tr>
3     <td>ini baris pertama kolom pertama</td>
4     <td>ini baris pertama kolom kedua</td>
5

```

Observe what changes appear on the screen.



8

Record your observations (question No. 16) and write your answer below.

With `<table border="1">`, the browser will render, A thin black line around the entire table. And thin black lines separating the individual cells within the table. This makes the table structure much clearer and easier to distinguish from surrounding content. The text "ini baris pertama kolom pertama" and "ini baris pertama kolom kedua" will now be enclosed within defined cells with visible boundaries.

9

Add one row to the table you previously created and add one column within it.

Write down the code for the modified `buatTabel.html`. (question No. 17) and write your answer below.

```

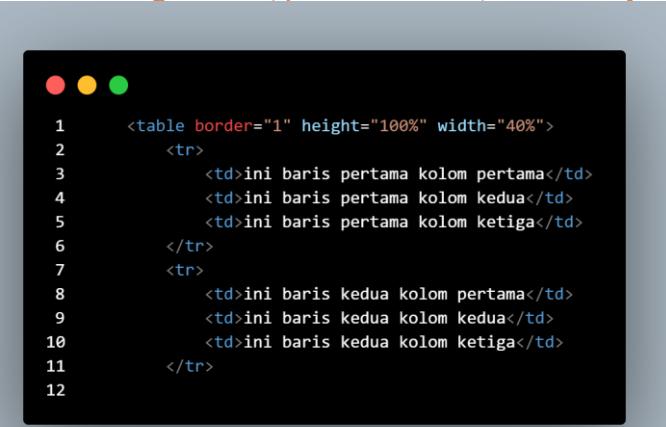
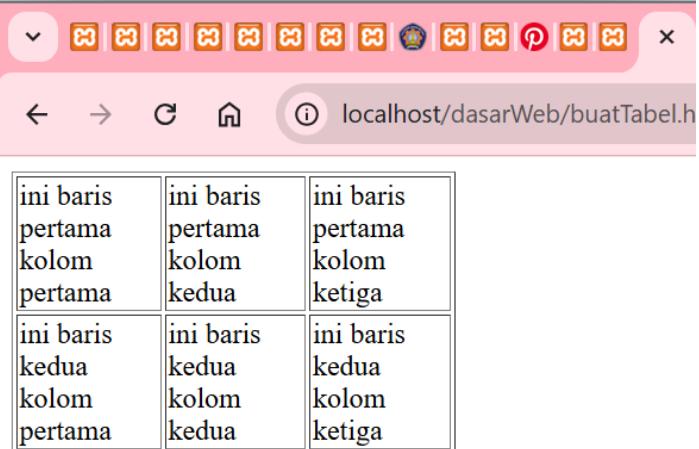
1 <table border="1">
2   <tr>
3     <td>ini baris pertama kolom pertama</td>
4     <td>ini baris pertama kolom kedua</td>
5   </tr>
6   <tr>
7     <td>ini baris kedua kolom pertama</td>
8     <td>ini baris kedua kolom kedua</td>
9     <td>ini baris kedua kolom ketiga</td>
10   </tr>
11 </table>
12

```

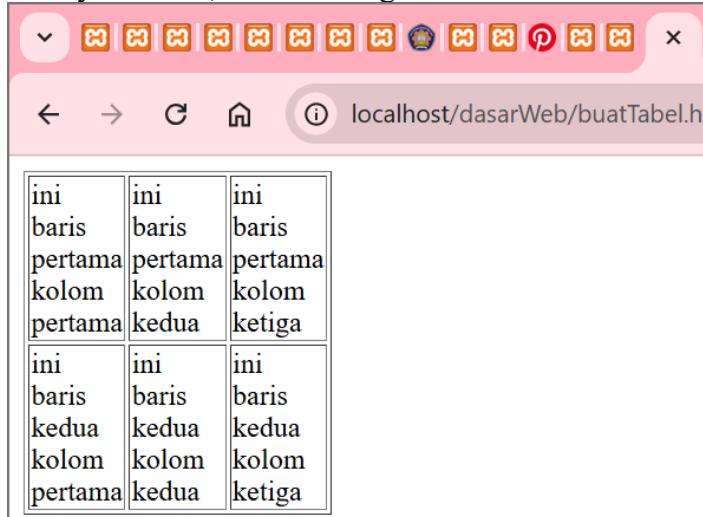


10

`<table border="1">` this is the main table tag, and `border="1"` ensures that the table and its cells have a visible border, making the structure clear. First `<tr>` (Row), this defines the first row of the table. It contains two `<td>` (table data) cells. So, the first row will display two cells side-by-side. The first row will have two cells, displaying their respective text.

	Second <tr> (Row), this defines the second row of the table. It contains three <td> (table data) cells. The second row will display three cells side-by-side. The second row will have three cells, displaying their respective text.						
12	From the code you modified in question No. 17, add the attributes <code>height="100%"</code> and <code>width="40%"</code> to the <code><table></code> tag.						
13	Save your work, then run it again in the browser at localhost/dasarWeb/buatTabel.html .						
	<p>Note the changes here (question No. 18) and write your answer below</p>  <pre> 1 <table border="1" height="100%" width="40%"> 2 <tr> 3 <td>ini baris pertama kolom pertama</td> 4 <td>ini baris pertama kolom kedua</td> 5 <td>ini baris pertama kolom ketiga</td> 6 </tr> 7 <tr> 8 <td>ini baris kedua kolom pertama</td> 9 <td>ini baris kedua kolom kedua</td> 10 <td>ini baris kedua kolom ketiga</td> 11 </tr> 12 13 </pre>  <table border="1"> <tbody> <tr> <td>ini baris pertama kolom pertama</td> <td>ini baris pertama kolom kedua</td> <td>ini baris pertama kolom ketiga</td> </tr> <tr> <td>ini baris kedua kolom pertama</td> <td>ini baris kedua kolom kedua</td> <td>ini baris kedua kolom ketiga</td> </tr> </tbody> </table>	ini baris pertama kolom pertama	ini baris pertama kolom kedua	ini baris pertama kolom ketiga	ini baris kedua kolom pertama	ini baris kedua kolom kedua	ini baris kedua kolom ketiga
ini baris pertama kolom pertama	ini baris pertama kolom kedua	ini baris pertama kolom ketiga					
ini baris kedua kolom pertama	ini baris kedua kolom kedua	ini baris kedua kolom ketiga					
14	<p>When this modified HTML code is run in a browser, the most noticeable visual change will be that the table now occupies 40% of the browser's width. While <code>height="100%"</code> is also applied, its effect on filling the entire screen height.</p>						
15	From the code you modified in step 12, remove the <code>%</code> symbol from height and width, so it becomes <code>height="100"</code> and <code>width="40"</code> .						

Save your work, then run it again in the browser at <localhost/dasarWeb/buatTabel.html>.



The screenshot shows a browser window with a pink header bar. The address bar displays the URL "localhost/dasarWeb/buatTabel.html". Below the address bar is a toolbar with various icons. The main content area of the browser shows a 2x3 grid table. The first row has three columns, and the second row also has three columns. All cells contain text: the first column of the first row contains "ini baris pertama", the second column contains "kolom pertama", and the third column contains "kolom ketiga". The second row follows a similar pattern with "ini baris kedua", "kolom kedua", and "kolom ketiga".

ini baris pertama	ini baris pertama	ini baris pertama
kolom pertama	kolom kedua	kolom ketiga
ini baris kedua	ini baris kedua	ini baris kedua
kolom pertama	kolom kedua	kolom ketiga

16

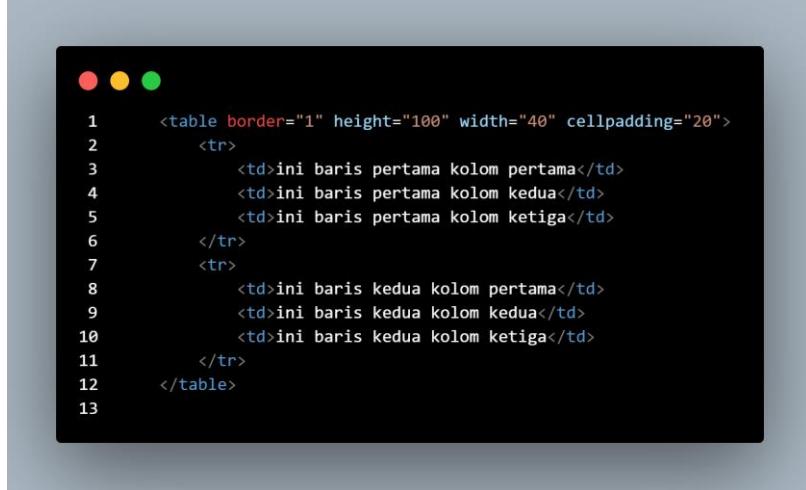
What do you understand about the difference between using and omitting % in the code? Note your understanding here (question No. 19) and write your answer below.

17

When omit the % sign, the browser interprets the value as pixels (px). So, width="40" means the table will be exactly 40 pixels wide, and height="100" means it will be 100 pixels tall. This provides a fixed size for the element

When include the % sign, the browser interprets the value as a percentage of its parent element's size. So, width="40%" means the table will be 40% of the width of its parent container (e.g., the <body>), and height="100%" means it will be 100% of the height of its parent container. This creates a responsive or fluid size

From the code you modified in step 15, add the attribute cellpadding="20".



The screenshot shows a terminal window with a dark background and light-colored text. It displays a block of HTML code with line numbers from 1 to 13. The code defines a table with a border of 1 pixel, a height of 100 pixels, and a width of 40 pixels. It uses the cellpadding attribute to set the padding between cells to 20 pixels. The table structure is identical to the one shown in the browser screenshot above.

```
1   <table border="1" height="100" width="40" cellpadding="20">
2     <tr>
3       <td>ini baris pertama kolom pertama</td>
4       <td>ini baris pertama kolom kedua</td>
5       <td>ini baris pertama kolom ketiga</td>
6     </tr>
7     <tr>
8       <td>ini baris kedua kolom pertama</td>
9       <td>ini baris kedua kolom kedua</td>
10      <td>ini baris kedua kolom ketiga</td>
11    </tr>
12  </table>
13
```

18

Save your work, then run it again in the browser at <localhost/dasarWeb/buatTabel.html>.

ini baris pertama kolom pertama	ini baris pertama kolom kedua	ini baris pertama kolom ketiga
ini baris kedua kolom pertama	ini baris kedua kolom kedua	ini baris kedua kolom ketiga

20

Note the changes here (question No. 20) and write your answer below.

The HTML code now includes the cellpadding="20" attribute in the <table> tag, which will significantly increase the spacing between the content of each cell and its border. This attribute adds 20 pixels of padding *inside* each table cell. Padding is the space between the content (text "ini baris pertama kolom pertama", etc.) and the cell's border.

21

From the code you modified in step 18, add the attribute cellspacing="5".

```

1   <table border="1" height="100" width="40" cellpadding="20" cellspacing="5">
2     <tr>
3       <td>ini baris pertama kolom pertama</td>
4       <td>ini baris pertama kolom kedua</td>
5       <td>ini baris pertama kolom ketiga</td>
6     </tr>
7     <tr>
8       <td>ini baris kedua kolom pertama</td>
9       <td>ini baris kedua kolom kedua</td>
10      <td>ini baris kedua kolom ketiga</td>
11    </tr>
12  </table>
13

```

22

Save your work, then run it again in the browser at <localhost/dasarWeb/buatTabel.html>.

ini baris pertama kolom pertama	ini baris pertama kolom kedua	ini baris pertama kolom ketiga
ini baris kedua kolom pertama	ini baris kedua kolom kedua	ini baris kedua kolom ketiga

23

Note the changes here (question No. 21) and write your answer below.

With the addition of `cellspacing="5"` to the `<table>` tag, the main change is a 5-pixel gap will appear between the cells of the table. Instead of the cell borders touching each other, there will be a small visible space (5 pixels) separating each cell from its neighbors, both horizontally and vertically.

24

From the code you modified in step 21, in the code used to set column 1 of row 1, add the attribute `align="right"`, so the code in that section becomes `<td align="right">`.

```

1 <table border="1" height="100" width="40" cellpadding="20" cellspacing="5">
2   <tr>
3     <td align="right">ini baris pertama kolom pertama</td>
4     <td>ini baris pertama kolom kedua</td>
5     <td>ini baris pertama kolom ketiga</td>
6   </tr>
7

```

25

Save your work, then run it again in the browser at localhost/dasarWeb/buatTabel.html.

ini baris pertama kolom pertama	ini baris pertama kolom kedua	ini baris pertama kolom ketiga
ini baris kedua kolom pertama	ini baris kedua kolom kedua	ini baris kedua kolom ketiga

Note your observations here (question No. 22) and write your answer below

26 The most notable change in the browser is that the text within the first cell of the table ("ini baris pertama kolom pertama") will now be aligned to the right within its cell. Previously, the text in the table cells would have aligned to the left by default. With the addition of align="right" to the first <td> tag, Right-aligned Text, the text "ini baris pertama kolom pertama" will shift to the right edge of its cell.

27 From the code you modified in step 24, add % to height and width, so it becomes `height="100%"` and `width="40%"`.

Next, in the code used to set column 1 of row 1, add the attribute `vAlign="bottom"`, so the code in that section becomes `<td align="right" valign="bottom">`.

```

1      <table border="1" height="100%" width="40%" cellpadding="20" cellspacing="5">
2          <tr>
3              <td align="right" valign="bottom">ini baris pertama kolom pertama</td>
4

```

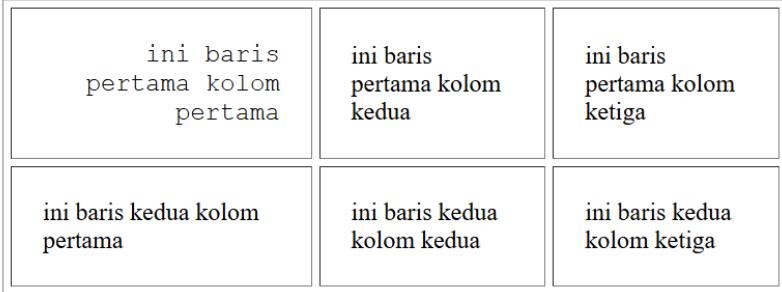
Save your work, then run it again in the browser at localhost/dasarWeb/buatTabel.html.



ini baris pertama kolom pertama	ini baris pertama kolom kedua	ini baris pertama kolom ketiga
ini baris kedua kolom pertama	ini baris kedua kolom kedua	ini baris kedua kolom ketiga

Note your observations here (question No. 23) and write your answer below.

30 The key change in the browser, with the addition of valign="bottom" and changing height and width to percentages, is that the text "ini baris pertama kolom pertama" will now be **aligned to**

	the bottom-right corner of its cell, and the table will attempt to fill 100% of the parent's height and 40% of its width.
31	From the code in step 28, add font settings to the content of the first row, first column, by adding the <code></code> tag inside the <code><td></code> tag. You can see this in step 32.
32	<pre><td align=right valign=bottom> ini baris pertama kolom pertama</td> <td>ini baris pertama kolom kedua</td> 1 <tr> 2 <td align="right" valign="bottom"> 3 ini baris pertama kolom pertama</td> 4 <td>ini baris pertama kolom kedua</td> 5 <td>ini baris pertama kolom ketiga</td> 6 </tr> 7</pre>
33	Save your work, then run it again in the browser at localhost/dasarWeb/buatTabel.html . 
33	<p>Note your observations here (question No. 24) and write your answer below.</p> <p>The main change in the browser is that the text "ini baris pertama kolom pertama" within the first table cell will now be displayed in a Courier-style font.</p>
34	Change the text color of "ini baris pertama kolom pertama" to red and set the size to 15. 
35	Write the modified code from step 34 in the <code>buatTabel.html</code> file here (question No. 25). And write your answer below

```

1      <td align="right" valign="bottom">
2          <font face=courier color="red" size="15"> ini baris pertama kolom pertama</font></td>
3

```

The key changes in the browser will be that the text "ini baris pertama kolom pertama" in the first table cell will now appear in red color and with a significantly larger font size.

After completing step 35 in the `buatTabel.html` code, add the attribute `colspan="2"` to the second row, first column, so that the `<table>` tag results in a code snippet similar to what is shown in step 37.

36

ini baris pertama kolom pertama	ini baris pertama kolom kedua
ini sekarang menjadi gabungan 2 kolom	

```

<table border=1 height=100% width=40% cellpadding= 20 cellspacing=5>
    <tr>
        <td align=right valign=bottom>
            <font face=courier>ini baris pertama kolom pertama</font></td>
            <td>ini baris pertama kolom kedua</td>
        </tr>
        <tr>
            <td colspan="2">ini sekarang menjadi gabungan 2 kolom</td>
        </tr>
    </table>

```

37

```

1      <table border="1" height="100%" width="40%" cellpadding="20" cellspacing="5">
2          <tr>
3              <td align="right" valign="bottom">
4                  <font face=courier color="red" size="15"> ini baris pertama kolom pertama</font></td>
5                  <td>ini baris pertama kolom kedua</td>
6              </tr>
7              <tr>
8                  <td colspan="2">ini sekarang menjadi gabungan 2 kolom</td>
9              </tr>
10             </table>
11

```

38

From the code you completed in step 36, add one more column to the first row, so that the display will look like what is shown in step 39.

ini baris pertama kolom pertama	ini baris pertama kolom kedua	tambah 1 kolom
ini sekarang menjadi gabungan 2 kolom		

39

(question No 26) Write down your code here

```

1   <table border="1" height="100%" width="40%" cellpadding="20" cellspacing="5">
2     <tr>
3       <td align="right" valign="bottom">
4         <font face=courier> ini baris pertama kolom pertama</font></td>
5       <td>ini baris pertama kolom kedua</td>
6       <td>tambah 1 kolom</td>
7     </tr>
8     <tr>
9       <td colspan="2">ini sekarang menjadi gabungan 2 kolom</td>
10    </tr>
11   </table>
12

```

40

Next, add one more column to the second row so that the display will look like what is shown in step 41.

41

ini baris pertama kolom pertama	ini baris pertama kolom kedua	tambah 1 kolom
ini juga tambah 1 kolom lagi	ini sekarang menjadi gabungan 2 kolom	

(question No 27) Write down your code here

```

1      <tr>
2          <td align="right" valign="bottom">
3              <font face=courier> ini baris pertama kolom pertama</font></td>
4          <td>ini baris pertama kolom kedua</td>
5          <td>tambah 1 kolom</td>
6      </tr>
7      <tr>
8          <td>ini juga tambah 1 kolom lagi</td>
9          <td colspan="2">ini sekarang menjadi gabungan 2 kolom</td>
10     </tr>
11

```

42

Add the attribute `rowspan="2"` to the second row, first column. Save your work, run it in the browser, and observe the changes.

ini baris pertama kolom pertama	ini baris pertama kolom kedua	tambah 1 kolom
ini juga tambah 1 kolom lagi	ini sekarang menjadi gabungan 2 kolom	

43

Note your observations here (question No. 28) and write your answer below.

```

1      <table border="1" height="100%" width="40%" cellpadding="20" cellspacing="5">
2          <tr>
3              <td align="right" valign="bottom">
4                  <font face=courier> ini baris pertama kolom pertama</font></td>
5                  <td>ini baris pertama kolom kedua</td>
6                  <td>tambah 1 kolom</td>
7          </tr>
8          <tr>
9              <td rowspan="2">ini juga tambah 1 kolom lagi</td>
10             <td colspan="2">ini sekarang menjadi gabungan 2 kolom</td>
11         </tr>
12     </table>
13

```

The changes in the browser are significant, as the table now features merged cells using rowspan and colspan attributes, creating a more complex layout. The first row has three standard cells, while the second row starts with a cell that is spanning into the row below (di case ini tidak ada baris ketiga) and then a cell that is twice as wide.

44

From the code in step 42, remove `rowspan="2"` from the second row, first column.

45

Then add `rowspan="2"` to the first row, first column so that the code will look like what is shown in step 46.

```


||
||
||


```

46

```

1      <tr>
2          <td rowspan="2" align="right" valign="bottom">
3              <font face=courier> ini baris pertama kolom pertama</font></td>
4              <td>ini baris pertama kolom kedua</td>
5              <td>tambah 1 kolom</td>
6      </tr>
7      <tr>
8          <td>ini juga tambah 1 kolom lagi</td>
9          <td colspan="2">ini sekarang menjadi gabungan 2 kolom</td>
10
11

```

Save your work and run it in your browser. Observe the difference between the code in step 42 and step 45.

47

	ini baris pertama kolom kedua	tambah 1 kolom
ini baris pertama kolom pertama	ini juga tambah 1 kolom lagi	ini sekarang menjadi gabungan 2 kolom

48

Note your observations here (question No. 29) and write your answer below.

The most significant change in the browser is that the first cell of the first row now spans two rows vertically and has specific text styling, while the overall table structure continues to utilize merged cells. First Cell (`<td>`) with `rowspan="2"`: The cell containing the text "ini baris pertama kolom pertama" now includes `rowspan="2"`. This means this cell will extend downwards to cover the height of two rows, effectively merging with the space in the second row.

Practical Section 12 : Working with Forms in HTML

A form is a place for data input before being processed by the system. Examples include login forms, comment forms, user data forms, and more. The process of data input from a form will be discussed in PHP, MySQL, and JavaScript materials. The tag used to create a form is the `<form>` tag, which can contain elements like `<input>`, `<textarea>`, `<option>`, and `<select>`.

The form has attributes such as action and method. The action attribute specifies the URL that will be executed and receives all the input from the form. If action is not specified, the form data will be sent to the same URL as the webpage itself, while the method attribute contains the method used by the form to submit the data (GET/POST).

- **GET**: Information is sent along with the URL.
- **POST**: Information is sent separately from the URL.

Syntax :

```
<form action="url" method="GET|POST">  
..... form fields  
</form>
```

INPUT Element

The `<input>` element is used to define the input that will be provided by the user. This element has attributes such as name, size, type, value, and checked.

- The `name` attribute defines the name of the input control within the form.
- The `size` attribute defines the size of the text within the input control.
- The `type` attribute defines the different types of input controls.
- The `value` attribute defines the initial value, reset, or submit value.
- The `checked` attribute defines the selected option for radio or checkbox types.

This element does not have a closing tag and must be placed within a `<form>` element.

Syntax :

```
<input name="name" type="text" value="Name of ....">  
<input name="name_val" size="number" type="checkbox" value="1" checked>
```

Attributes type:

Type	Description
<code>button</code>	<code><input type="button"></code> : Defines a clickable button (usually used with a JavaScript script).
<code>checkbox</code>	<code><input type="checkbox"></code> : Defines a checkbox.
<code>color (HTML5)</code>	<code><input type="color"></code> : Defines a color picker.
<code>date (HTML5)</code>	<code><input type="date"></code> : Defines a date picker (year, month, day with no time).
<code>datetime-local (HTML5)</code>	<code><input type="datetime-local"></code> : Defines a date and time picker (year, month, day, time with no timezone).
<code>email (HTML5)</code>	<code><input type="email"></code> : Defines an input area for an email address.
<code>file</code>	<code><input type="file"></code> : Defines an area for selecting a file with a "Browse" button (for file uploads).
<code>hidden</code>	<code><input type="hidden"></code> : Defines a hidden input field.
<code>image</code>	<code><input type="image"></code> : Defines an image as a button.
<code>month (HTML5)</code>	<code><input type="month"></code> : Defines a month and year picker (no timezone).
<code>number (HTML5)</code>	<code><input type="number"></code> : Defines an area for entering a number.

password	<code><input type="password"></code> : Defines an area for entering a password.
radio	<code><input type="radio"></code> : Defines a radio button.
range (HTML5)	<code><input type="range"></code> : Defines a range control (like a slider).
reset	<code><input type="reset"></code> : Defines a reset button.
search (HTML5)	<code><input type="search"></code> : Defines a text area for entering a search query.
submit	<code><input type="submit"></code> : Defines a submit button.
tel (HTML5)	<code><input type="tel"></code> : Defines a text area for entering a phone number.
text	<code><input type="text"></code> : Default. Defines a single-line text area.
time (HTML5)	<code><input type="time"></code> : Defines a time picker (no timezone).
url (HTML5)	<code><input type="url"></code> : Defines an area for entering a URL.
week	<code><input type="week"></code> : Defines a week and year picker (no timezone).

SELECT Element

The `<select>` attribute is used to define selectable options in a form control. This element has attributes such as name, size, and multiple (which allows multiple selections). This element must be placed within a `<form>` element.

Syntax :

```
<select name="name" size="number" multiple>
    .....
</select>
```

OPTION Element

The `<option>` element defines the selectable options within a `<select>` menu. This element has attributes such as selected and value. The `selected` attribute indicates the default selected option, and the `value` attribute holds the value associated with the option element.

Syntax:

```
<select name="name" size="number">
    <option value="value-1">Text 1</option>
    <option value="value-2">Text 2</option>
    <option value="value-3">Text 3</option>
</select>
```

TEXTAREA Element

The `<textarea>` element functions as a form input control for entering multi-line text. This element has attributes such as `name`, `cols`, and `rows`. The `name` attribute defines the name of the input control for the `<textarea>` element, the `cols` attribute defines the number of visible columns in the textarea, and the `rows` attribute defines the number of visible rows in the textarea. This element must be placed within a `<form>` element.

Syntax:

```
<textarea name="name" rows="number" cols="number">
    .....
</textarea>
```

Practical Steps:

Steps	Description
1	<p>First, in this practical session, you will create a form with elements as shown in the picture:</p> <div style="border: 1px solid black; padding: 10px; width: fit-content; margin: auto;"> <p>FORM</p> <p>Enter your name here.</p> <p>Are you a student? <input type="checkbox"/></p> <p>How old are you?</p> <ul style="list-style-type: none"> <input type="radio"/> 10 - 15 <input type="radio"/> 16 - 20 <input checked="" type="radio"/> 21 - 25 <p><input type="button" value="Send"/> <input type="button" value="Clear"/></p> </div>
2	<p>Create a file named <code>buatForm.html</code> and save it in the <code>dasarWeb</code> folder that you created in Practical Section 2.</p>
3	<p>Type the following code into <code>buatForm.html</code>:</p>
4	<pre><html> <head> <title>Membuat Form</title> </head> <body> <form method="POST" action="gambar.html"> <h4>FORM</h4> <input type="text" name="var1" SIZE="30" VALUE="Enter your name here.">

 Are you a student? <input type="checkbox" name="var3">

 How old are you?
 <input type="radio" name="var4" value="r1">10 - 15
 <input type="radio" name="var4" value="r2">16 - 20
 <input type="radio" name="var4" value="r3">21 - 25

 <input type="submit" name="var5" value="Send"> <input type="reset" name="var6" value="Clear"> </form> </body> </html></pre>

```

1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4     <title>Membuat Form</title>
5 </head>
6 <body>
7     <form method="POST" action="gambar.html">
8         <h4>FORM</h4>
9         <input type="text" name="var1" SIZE="30" VALUE="Enter your name here.">
10        <BR></BR>
11        <B>Are you a student?</B>
12        <input type="checkbox" name="var3">
13        <BR></BR>
14        <B>How old are you?</B>
15        <BR>
16            <input type="radio" name="var4" value="r1">10 - 15 <BR>
17            <input type="radio" name="var4" value="r2">16 - 20 <BR>
18            <input type="radio" name="var4" value="r3">21 - 25 <BR><BR>
19            <input type="submit" name="var5" value="Send">
20            <input type="reset" name="var6" value="Clear">
21        </form>
22    </body>
23 </html>

```

5 Save the file, then open your browser and type the following address: localhost/dasarWeb/buatForm.html.

Observe what appears in the browser.

FORM

Are you a student?

6 **How old are you?**

- 10 - 15
- 16 - 20
- 21 - 25

Note your observations and understanding here (question No. 30) and write your answer below.

The HTML code creates a simple webpage with a form that allows users to input their name, indicate if they are a student, select their age range, and then submit or clear the form.

7 At the top, there will be a small heading "FORM" (due to the `<h4>` tag). A text input box will appear, pre-filled with the text "Enter your name here.". This is a single-line input field where users can type their name. Below the name field, the bold text "Are you a student?" will be displayed, followed by a checkbox (`<input type="checkbox" name="var3">`). Users can click this box to select or deselect it. Further down, the bold text "How old are you?" will appear, followed by three radio buttons (`<input type="radio" name="var4" ...>`). These buttons are grouped, meaning a user can only select one of the three options. "Send" Clicking this button will submit the form data to the action URL specified in the `<form>` tag (in this case, "gambar.html"). "Clear" (`<input type="reset" name="var6" value="Clear">`): Clicking this button will reset all input fields in the form to their initial VALUE.

8	<p>Note your observations and understanding here (question No. 30) and write your answer below. Add a text input field to enter an address, placing it below the text input field for entering a name. Save the file, then run it in the browser at localhost/dasarWeb/buatForm.html.</p>
9	<p>Observe what changes in the display.</p> <p>FORM</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <input name="name" type="text" value="Enter your name here."/> </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <input name="address" type="text" value="Enter your address here."/> </div> <p>Are you a student? <input type="checkbox"/></p> <p>How old are you?</p> <p><input type="radio"/> 10 - 15 <input type="radio"/> 16 - 20 <input type="radio"/> 21 - 25</p> <p>Send Clear</p>
10	<p>Record the code you added in step 7 here (question No. 31) and write your answer below.</p> <pre> 1 <input type="text" name="var1" SIZE="30" VALUE="Enter your name here."> 2
</BR> 3 <input type="text" name="var2" SIZE="30" VALUE="Enter your address here."> 4
</BR> 5 </pre>
11	<p>The key change in the browser is the addition of a second text input field for an address, placed directly below the existing input field for the name. This new input field uses name="var2", which correctly distinguishes it from the name input field (name="var1"). This ensures that when the form is submitted, both the name and address data can be separately identified.</p>
12	<p>Add the following program code below the last radio button, above the submit and clear buttons.</p> <pre> Which one do you have?

 <input type="checkbox" name="vehicle1" value="Bike" checked> I have a bike
 <input type="checkbox" name="vehicle2" value="Car"> I have a car
 <input type="checkbox" name="vehicle3" value="Boat"> I have a boat
 </pre> <pre> 1 Which one do you have?

 2 <input type="checkbox" name="vehicle1" value="Bike" checked> I have a bike
 3 <input type="checkbox" name="vehicle2" value="Car"> I have a car
 4 <input type="checkbox" name="vehicle3" value="Boat"> I have a boat
 5 </pre>
12	<p>Does the display in the browser look like the one shown below? (question No. 32).</p>

FORM**Are you a student?** **How old are you?**

- 10 - 15
- 16 - 20
- 21 - 25

Which one do you have?

- I have a bike
- I have a car
- I have a boat

Write your answer here :**FORM****Are you a student?** **How old are you?**

- 10 - 15
- 16 - 20
- 21 - 25

Which one do you have

- I have a bike
- I have a car
- I have a boat

Yes, it is. It looks exactly like the example above.

- | | |
|----|---|
| 13 | From the code you modified in question No. 32, add a checkbox input that displays the option "I have a plane" and move the checkmark ✓ from the option "I have a bike" to the checkbox option "I have a plane". |
| 14 | Save your work, then run it again in the browser at localhost/dasarWeb/buatForm.html . |

FORM

Enter your name here.

Enter your address here.

Are you a student?

How old are you?

- 10 - 15
- 16 - 20
- 21 - 25

Which one do you have

- I have a bike
- I have a car
- I have a boat
- I have a plane

Send **Clear**

Write down here the code for the entire checkbox configuration, including the code for the checkbox you just added. (question No. 33). Write your answer below

```
1 <b>Which one do you have</b><br><br>
2 <input type="checkbox" name="vehicle1" value="Bike"> I have a bike<br>
3 <input type="checkbox" name="vehicle2" value="Car"> I have a car<br>
4 <input type="checkbox" name="vehicle3" value="Boat"> I have a boat<br>
5 <input type="checkbox" name="vehicle4" value="Plane" checked> I have a plane<br>
6
```

15

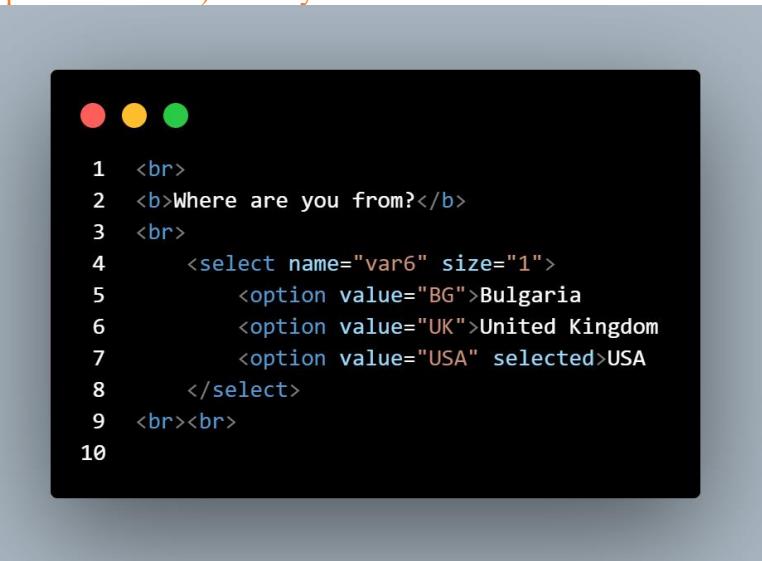
16 Add the program code from step 17 into the program code you modified in step 13. Place it below the checkbox configuration and above the button configuration.

17

```
<br>
<b>Where are you from?</b>
<br>
    <select name="var6" size="1">
        <option value="BG">Bulgaria
        <option value="UK">United Kingdom
        <option value="USA" selected>USA
    </select>
<br><br>
```

18

Save your work, then run it again in the browser at <localhost/dasarWeb/buatForm.html>.

	<p>FORM</p> <p>Enter your name here.</p> <p>Enter your address here.</p> <p>Are you a student? <input type="checkbox"/></p> <p>How old are you?</p> <ul style="list-style-type: none"> <input type="radio"/> 10 - 15 <input type="radio"/> 16 - 20 <input type="radio"/> 21 - 25 <p>Which one do you have</p> <ul style="list-style-type: none"> <input type="checkbox"/> I have a bike <input type="checkbox"/> I have a car <input type="checkbox"/> I have a boat <input checked="" type="checkbox"/> I have a plane <p>Where are you from?</p> <p>USA</p> <p><input type="button" value="Send"/> <input type="button" value="Clear"/></p>
19	<p>Note here what the code snippet in step 17 means (how it works). (question No. 34) Write your answer below.</p>  <pre> 1
 2 Where are you from? 3
 4 <select name="var6" size="1"> 5 <option value="BG">Bulgaria 6 <option value="UK">United Kingdom 7 <option value="USA" selected>USA 8 </select> 9

 10 </pre> <p>The main change in the browser is the addition of a dropdown menu that allows the user to select their country of origin.</p> <p>The bold text "Where are you from?" will appear on its own line, preceded and followed by line breaks (
) for spacing. Dropdown Menu (<select>), below the question, a dropdown menu will be displayed, size="1" means it will appear as a single-line dropdown box. This dropdown menu will contain three selectable options. "USA" will be pre-selected and visible in the dropdown menu when the page loads, due to the selected attribute.</p>
19	From the code you modified in step 17, add one more country option, "Indonesia," and set "Indonesia" as the default selected option.
20	Save your work, then run it again in the browser at localhost/dasarWeb/buatForm.html .
20	Note the changes here (question No. 35) and write your answer below.

Where are you from?

Send **Clear**

```
1 <br>
2 <select name="var6" size="1">
3     <option value="BG">Bulgaria
4     <option value="UK">United Kingdom
5     <option value="USA">USA
6     <option value="Indonesia" selected>Indonesia
7 </select>
8 <br><br>
9
```

The change in the browser is that the dropdown menu now includes "Indonesia" as a new option, and "Indonesia" will be pre-selected when the page loads. Previously, "USA" was the default selection. Now, because the selected attribute has been moved, "Indonesia" will be the country visible in the dropdown menu when the page initially loads.

21 From the code in step 17, change the value of `size=1` to `size=2`.

22 Save your work, then run it again in the browser at localhost/dasarWeb/buatForm.html.

Note the changes here (question No. 36) and write your answer below.

Where are you from?

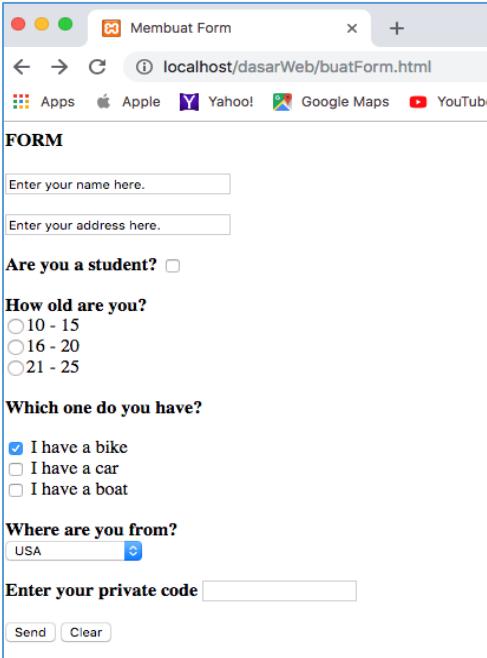
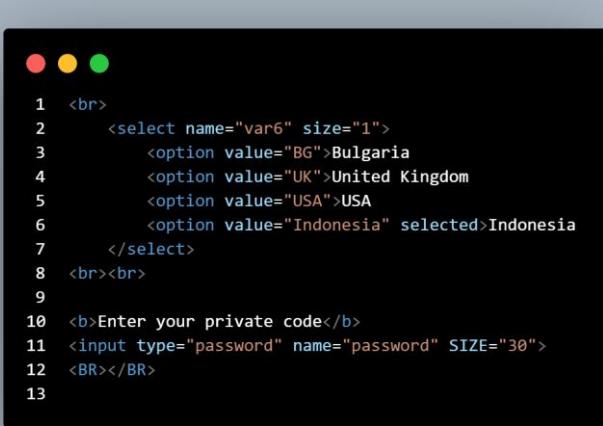
Send **Clear**

```
1 <select name="var6" size="2">
2     <option value="BG">Bulgaria
3     <option value="UK">United Kingdom
4     <option value="USA">USA
5     <option value="Indonesia" selected>Indonesia
6 </select>
7
```

23

The most significant change in the browser is that the dropdown menu now appears as a list box displaying two options at a time, with "Indonesia" still pre-selected. Instead of a traditional single-line dropdown menu that expands, the "Where are you from?" field will now appear as a list box. This box will be tall enough to display two options simultaneously without needing to be clicked.

24 From the code you modified in step 21, revert the value of `size` back to 1.

25	Save your work, then run it again in the browser at localhost/dasarWeb/buatForm.html .
26	From the code you modified in step 24, add a single text area to input a password using the <code><input></code> element with the <code>type="password"</code> , so that the display will look like this: 
27	Save your work, then run it again in the browser at localhost/dasarWeb/buatForm.html . Enter your private code <input type="text"/> <input type="button" value="Send"/> <input type="button" value="Clear"/>
28	Record the code you added in step 26 here. (question No. 37) and write your answer below.  <pre> 1
 2 <select name="var6" size="1"> 3 <option value="BG">Bulgaria 4 <option value="UK">United Kingdom 5 <option value="USA">USA 6 <option value="Indonesia" selected>Indonesia 7 </select> 8

 9 10 Enter your private code 11 <input type="password" name="password" SIZE="30"> 12
</BR> 13 </pre>
29	From the code in step 28, add a text area for typing long comments using the <code><textarea></code> and <code></textarea></code> tags, so that the display will look like this:

FORM

Enter your name here.

Enter your address here.

Are you a student?

How old are you?

10 - 15
 16 - 20
 21 - 25

Which one do you have?

I have a bike
 I have a car
 I have a boat

Where are you from?
 USA

Enter your private code

Enter your comment
 Fill this area

Send Clear

30 Save your work, then run it again in the browser at localhost/dasarWeb/buatForm.html.

Please record the code you added in step 29 here (question No. 37). Write your answer here

```
<b>Enter your comment</b> <br>
<textarea type="comment" name="comment" SIZE="30" rows="5" cols="50">Fill this area
</textarea>
<BR></BR>
```

31

```
1 <b>Enter your comment</b> <br>
2 <textarea type="comment" name="comment" SIZE="30" rows="5" cols="50">Fill this area
3 </textarea>
4 <BR></BR>
5
```

32 Notice that the `<form>` tag includes the attribute `method="POST"`. Run the form again in the browser at localhost/dasarWeb/buatForm.html, fill out the form, and then click the "Send" button. Observe the URL in the address bar of the page you are directed to after clicking the "Send" button.

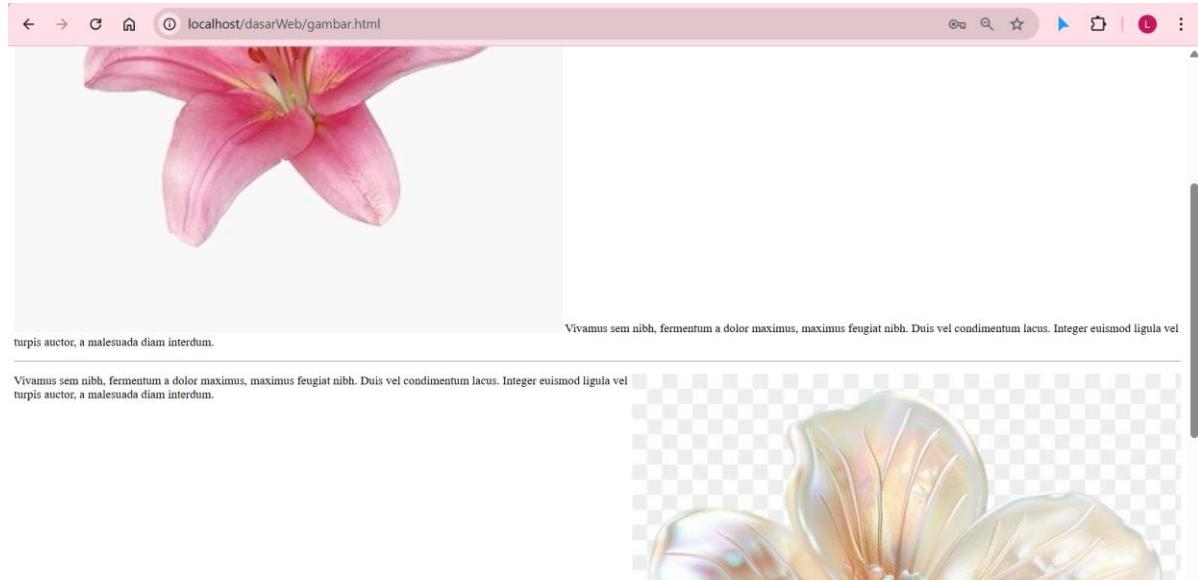
33 Open the `bauForm.html` code again and change the method from `POST` to `GET`. Save the file, then run it again in the browser at localhost/dasarWeb/buatForm.html. Fill out the form and click the "Send" button. Observe the URL in the address bar of the page you are directed to after clicking the "Send" button.

Compare and note the differences between the `GET` and `POST` methods based on what you observe.

Note your observations here (question No. 38) and write your answer below.

The key difference observed in the browser is how data is transmitted and displayed in the URL.

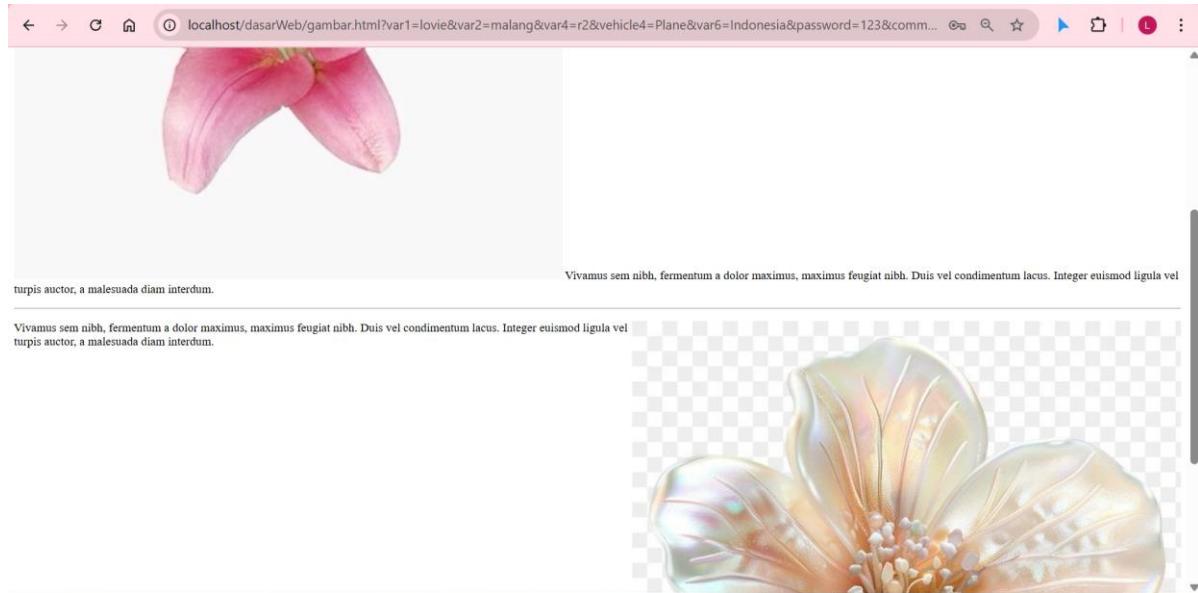
POST



When using the POST method, as shown above, the browser's address bar displays a clean URL like `localhost/dasarWeb/gambar.html`. This indicates that the form data (e.g., name, address, age, etc.) is not appended to the URL. Instead, it's sent in the body of the HTTP request, which is not visible to the user in the address bar. This makes POST suitable for sending sensitive information like passwords or large amounts of data, as it's not exposed in the URL or browser history.

34

GET



In contrast, when using the GET method, the second screenshot clearly shows the form data appended to the URL as a query string:

<http://localhost/dasarWeb/gambar.html?var1=lovie&var2=malang&var4=r2&vehicle4=Plane&var6=Indonesia&password=123&comment=jobsheet+1&var5=Send>

Each form field's name and value are visible as name=value pairs, separated by &, and starting after a ?. This makes GET useful for requests that retrieve data (like search queries) or for situations where users might want to bookmark a specific state of the page. However, it's less secure for sensitive data and has limitations on the amount of data that can be sent due to URL length restrictions.

References:

1. Jason Beaird, *The Principles of Beautiful Web Design*
2. Rian Ariona, *Belajar HTML dan CSS (Tutorial Fundamental dalam mempelajari HTML dan CSS)*
3. Adi Hadisaputra, *HTML dan CSS Fundamental dari Akar menuju Daun*
4. John Duckett, *HTML and CSS: Design and Build Websites*

Github link:

<https://github.com/Lovie-Tonimba/semester3-PemrogramanWeb.git>