

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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Topic

- Introduction to Basic Concepts of the Internet and Web

- Laragon Installation
- Introduction to HTML Fundamentals

Objectives

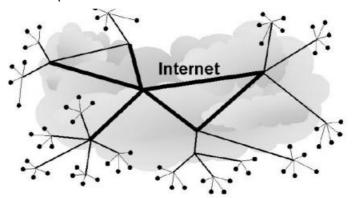
Students are expected to:

- 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.

```
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
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

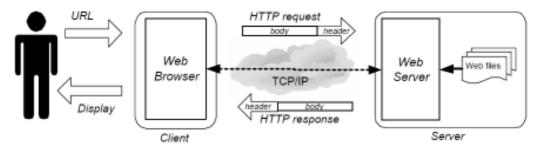
C:\Users\zawar>
```

- 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.

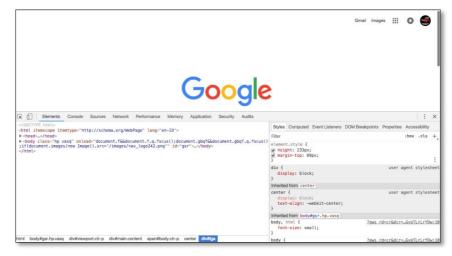


Picture 4. HTTP Request and Response

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).

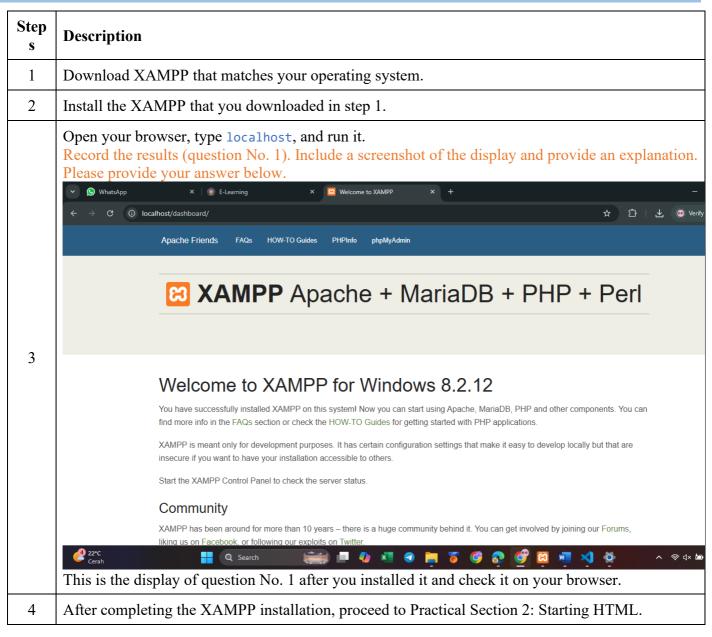
HTML can be read on various platforms and is a flexible programming language that can be combined with other programming languages such as PHP, ASP, JSP, and JavaScript. Certain tags in HTML documents define how text is formatted, and there are also other tags that specify how to respond to user actions. 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.



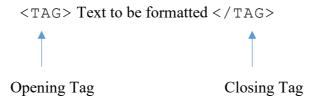
Picture 5. Inspect Element

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. XAMPP Installation



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:

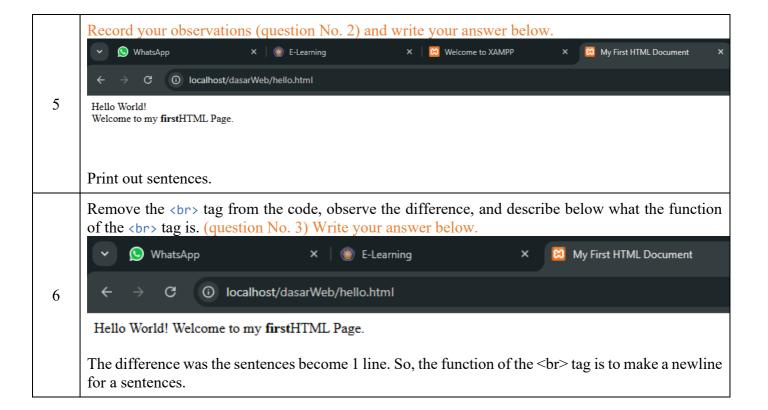
- <head> and </head>: Used to declare information about the HTML document.
- <title> and </title>: Used to add the title in the browser's title bar.
- <body> and </body>: Used to enclose all the text on the HTML page.

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

Step s	Description	
1	Open the XAMPP folder in the directory where you installed XAMPP. Navigate to the directory D:\Xampp\htdocs, and then create a new folder named dasarWeb.	
2	Next, open your text editor, create a new file named hello.html, and save it in the dasarWeb directory that you just created.	
	<pre>hello.html x 1</pre>	
3	Open your browser and type the following address: localhost/dasarWeb/hello.html.	
4	Observe what appears in the browser.	



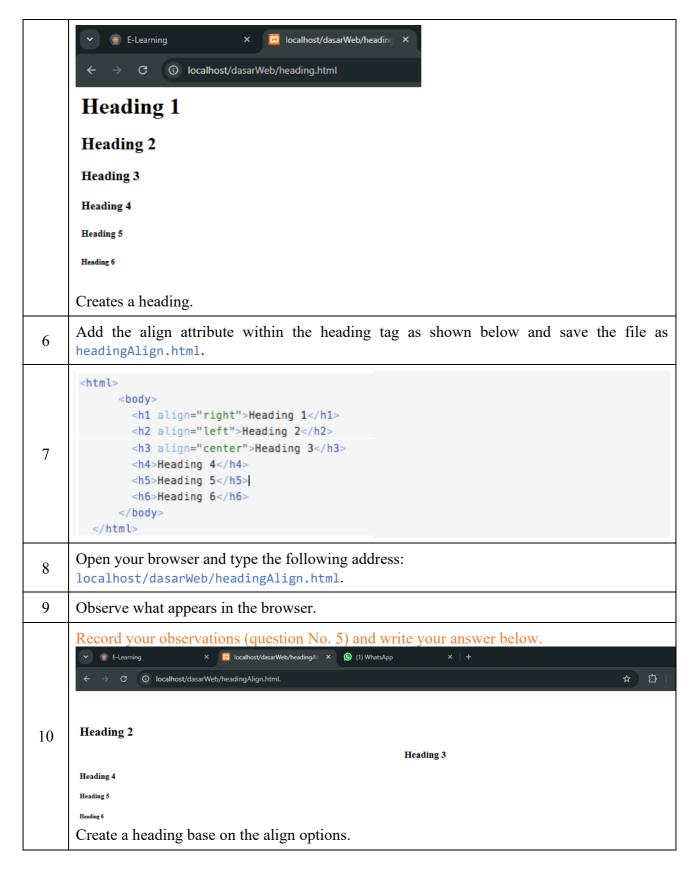
Practical Section 3: Text Formatting

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 $\langle hn \rangle$ tag and is closed with the $\langle hn \rangle$ tag, where n represents the type, with values ranging from 1 to 6.

Step s	Description	
1	Create a file named heading.html and save it in the dasarWeb folder that you created in Practical Section 2.	
2	Type the following code into heading.html	
	<pre>heading.html * 1</pre>	
3	Open your browser and type the following address: localhost/dasarWeb/heading.html.	
4	Observe what appears in the browser.	
5	Record your observations (question No. 4) and write your answer below.	



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 tag. The tag is actually a paired tag, although in practice, the closing tag is often omitted.

Step s	Description

```
Buat sebuah file bernama paragraf.html dan simpan file tersebut di dalam folder dasarWeb
1
    yang telah dibuat pada Praktikum 2.
2
    Ketikkan kode di bawah ini dalam paragraf.html
    <!DOCTYPE html>
    <html lang="en">
      <body>
        >
          First paragraph
        3
          This is the second paragraph
        And this is the third paragraph
        </body>
    </html>
    Open your browser and type the following address:
4
    localhost/dasarWeb/paragraf.html.
5
    Observe what appears in the browser.
    Record your observations (question No. 6) and write your answer below.
               E-Learning
                                                 localhost/dasarWeb/paragraf.ht
                 G
                       localhost/dasarWeb/paragraf.html
6
     First paragraph
      This is the second paragraph
     And this is the third paragraph
    Making a paragraph.
7
    To adjust the paragraph alignment, use the align attribute within the paragraph tag.
    Add the align attribute in the paragraph tag as shown below and save the file as
8
    paragrafAlign.html.
    <!DOCTYPE html>
    <html lang="en">
      <head>
        <title>
          Manage Paragraph
        </title>
      </head>
      <body>
          9
           First Paragraph
          This is the second paragraph
          And this is the third paragraph
      </body>
    </html>
```



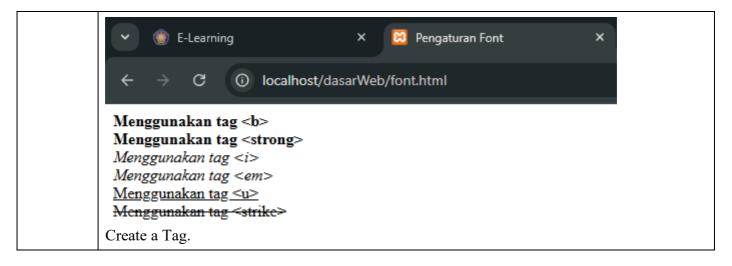
Font

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

For example, the < character is represented by the entity name &1t, 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	<pre>font.html x 1</pre>	
4	Open your browser and type the following address: localhost/dasarWeb/font.html.	
5	Observe what appears in the browser.	
6	Record your observations (question No. 8) and write your answer below.	



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	©
R	Registered	®
TM	Trademark	™

Practical Section 5: Special Characters

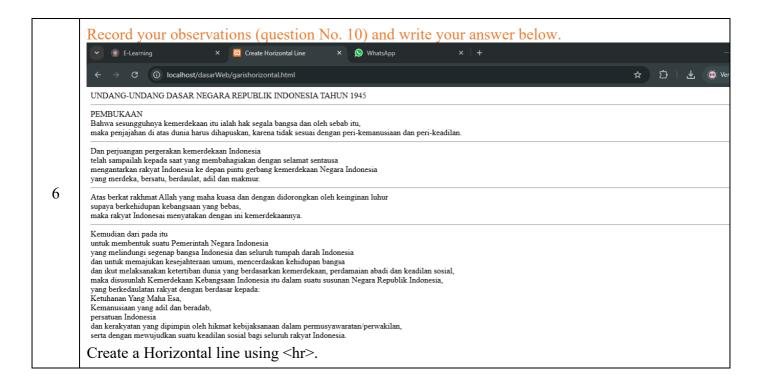
Steps	Description	
1	Create a file named karakter.html and save it in the dasarWeb folder that you created in Practical Section 2.	
2	Type the following code into karakter.html:	
3	<pre></pre>	
4	Open your browser and type the following address: localhost/dasarWeb/karakter.html.	
5	Observe what appears in the browser.	
6	Record your observations (question No. 9) and write your answer below.	



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.

Description	
Buat sebuah file bernama garishorizontal.html dan simpan file tersebut di dalam folder dasarWeb yang telah dibuat pada Praktikum 2.	
Ketikkan kode di bawah ini dalam garishorizontal.html	
<pre>(IDOCTYPE html) (html lang="en") (head></pre>	
Open your browser and type the following address: localhost/dasarWeb/garishorizontal.html.	
Observe what appears in the browser.	



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 list.html and save it in the dasarWeb folder that you created in Practical Section 2.
2	Type the following code into list.html:

```
♦ list.html ×
           1
               <html>
           2
           3
                  <title>Bekerja dengan List</title>
           4
                  </head>
           5
                  <body>
           6
                    Ordered List
           7
                      8
                        satu
                         dua
           9
          10
                         tiga
                      11
          12
                      <br>
          13
                      <hr>
          14
                      Unordered List
          15
                      <l
3
          16
                        satu
                      dua
          17
          18
                         tiga
          19
                      20
                     <br>
          21
          22
                      Definition List
          23
                      <dl>
          24
                         <dt>satu</dt>
          25
                         <dd>satu satu</dd>
          26
                         <dd>satu dua</dd>
          27
                         <dt>dua</dt>
                         <dd>dua</dd>
          28
          29
                      </dl>
          30
                   </body>
          31
               </html>
4
        Open your browser and type the following address: localhost/dasarWeb/list.html.
5
        Observe what appears in the browser.
        Record your observations (question No. 11) and write your answer below.
                                            🗵 Bekerja dengan List
              E-Learning
                   G
                        i localhost/dasarWeb/list.html
         Ordered List
            1. satu
            2. dua
            3. tiga
         Unordered List
6
            • satu

    dua

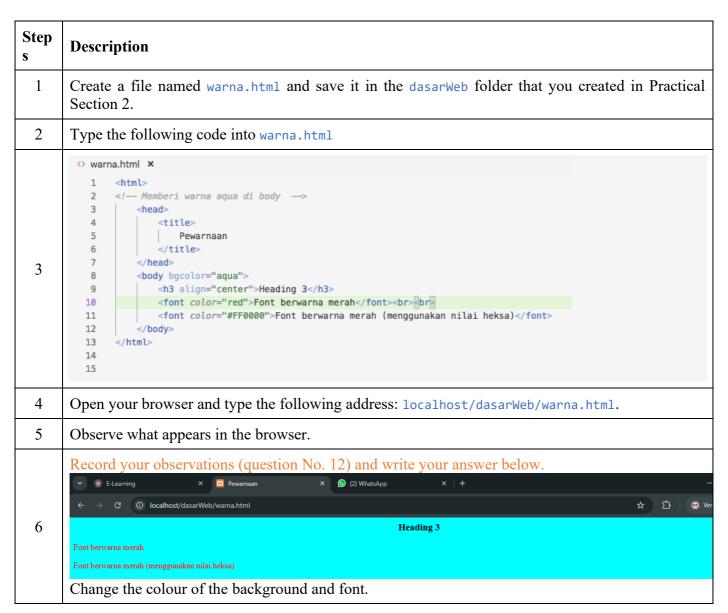
    tiga

        Definition List
        satu
              satu satu
              satu dua
         dua
              dua dua
        Create 3 different types of List.
```

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).

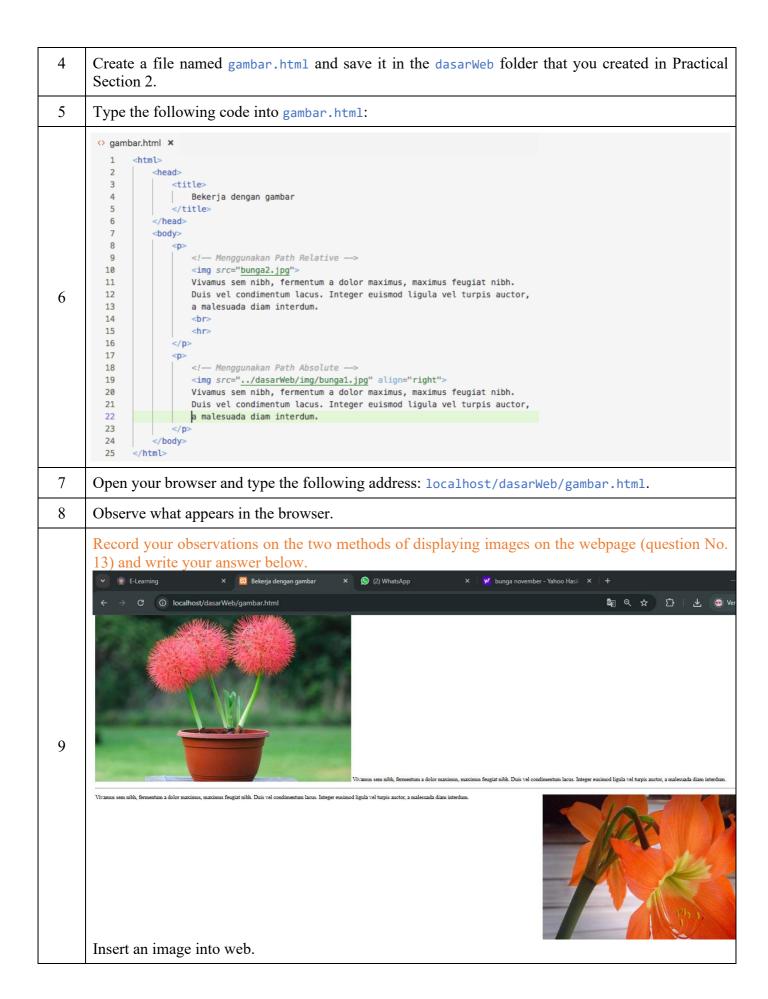
For certain other elements, the color attribute is available to apply coloring. Similar to bgcolor, the value of this attribute can also be a color name or a hexadecimal code.



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.

Step s	Description
1	Place an image in the dasarWeb folder with any size and name the image bunga2. If the image is in JPG format, the name should be bunga2.jpg (the file can be in a format other than JPG).
2	Create a new folder inside the dasarWeb folder and name it img.
3	Place a different image with any size in the img folder and name it bunga1. If the file is in JPG format, the name should be bunga1.jpg (the file can be in a format other than JPG).



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.

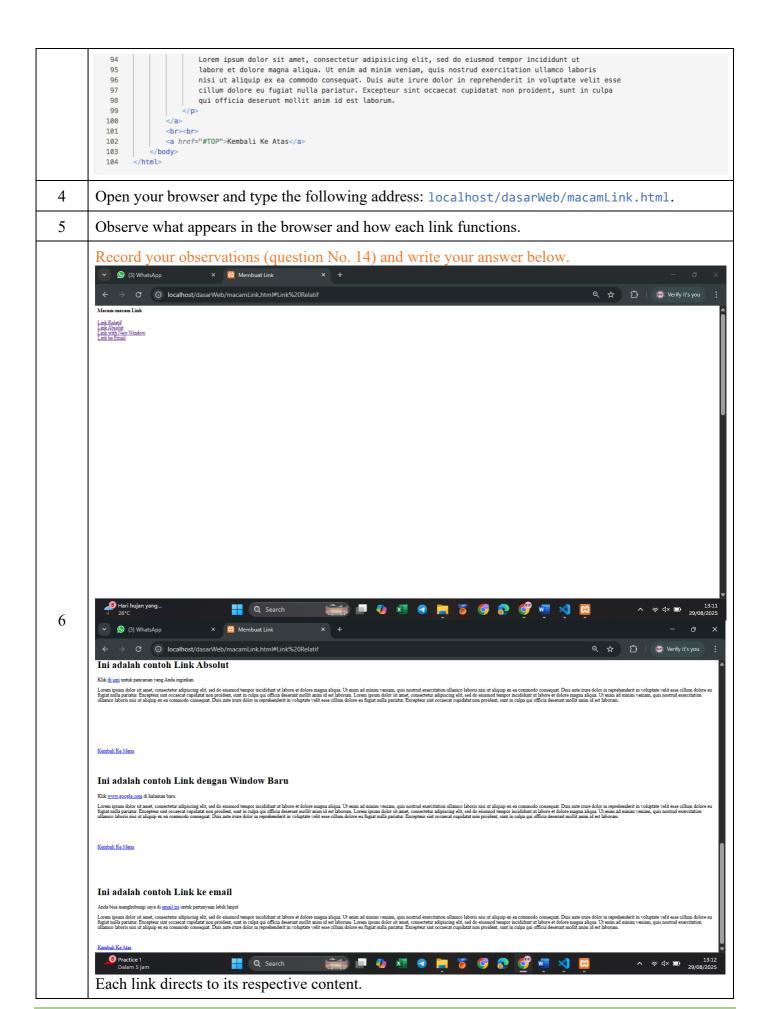
Steps to name a section within a document:

- 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:

Steps	Description
1	Create a file named macamLink.html and save it in the dasarWeb folder that you created in Practical Section 2.
2	Type the following code into macamLink.html:
3	

```
o macamLink.html x
          <title>Membuat Link</title>
          <head>
          </head>
          <body>
                    e="T0P">
                 <h4>Macam-macam Link</h4>
                 <a href ="#Link Relatif">Link Relatif</a><br>
                 <a href ="#Link Absolut">Link Absolut</a><br
                 <a href ="#Link with New Window">Link with New Window</a><br>
                <a href ="#Link ke Email">Link Ke Email</a>
 12
 14
             15
             17
             18
             20
             21
             22
 23
             24
             25
 26
             27
             28
 29
              <a name="Link Relatif">
 30
                 <h1>Ini adalah contoh Link Relatif</h1>
 32
                    Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
 33
                     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
 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
                     nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
 40
 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/>br>
<br/>br>
<br/>br>
 43
                     <a href="#TOP">Kembali Ke Menu</a>
 44
 45
                  46
              </a><br><br
 47
              <a name ="Link Absolut":
 48
                 <h1>Ini adalah contoh Link Absolut</h1>
 49
                     Klik <a href="http://www.google.com">di sini</a> untuk pencarian yang Anda inginkan.<br>
 50
                     Lorem 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
 51
 52
 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.
                     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
                     nisi ut aliquip ex ea commodo conseguat. 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
 60
                     61
                     <a href="#TOP">Kembali Ke Menu</a
 63
 64
              </a>
 65
                     ="Link with New Window">
 66
 67
                 <h1>Ini adalah contoh Link dengan Window Baru</h1>
 68
 69
                     Buka <a href="http://www.google.com" target="_blank">www.google.com</a> di halaman baru.<br>
 70
                     Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
 71
                     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
 72
                     cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
 74
                     qui officia deserunt mollit anim id est laborum.
                     Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
 75
 76
                     labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
 77
                     nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse
 78
                     cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa
 79
                     80
 81
                     82
                  83
 84
                     ="Link ke Email">
 85
                 <h1>Ini adalah contoh link ke email</h1>
 86
                     Anda bisa menghubungi saya di <a href = "mailto:dyah.ayu@polinema.ac.id">email ini</a>
 88
                     untuk pertanyaan lebih lanjut.<br><br>
                     Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut
 89
                     labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris
 90
 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
                     qui officia deserunt mollit anim id est laborum.
 93
```



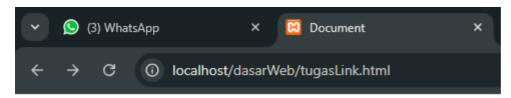
Practical Task Section 10: Links

Create a webpage and name it tugasLink.html.

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

```
.html
                            gambar.html
                                                                    tugasLink.html X
           warna.html
                                               macamLink.html
 D: > Xampp > htdocs > dasarWeb > ♦ tugasLink.html > ♦ html > ♦ body > ♦ a > ♦ img
         <!DOCTYPE html>
    2
         <html lang="en">
    3
         <head>
             <meta charset="UTF-8">
    4
             <meta name="viewport" content="width=device-width, initial-scale=1.0">
    5
    6
             <title>Document</title>
         </head>
    7
    8
         <body>
             <h4>Click the image below to redirect into google</h4>
    9
   10
             <a href="http://www.google.com"><img src="Google1.png" alt=""></a>
   11
         </body>
   12
         </html>
```

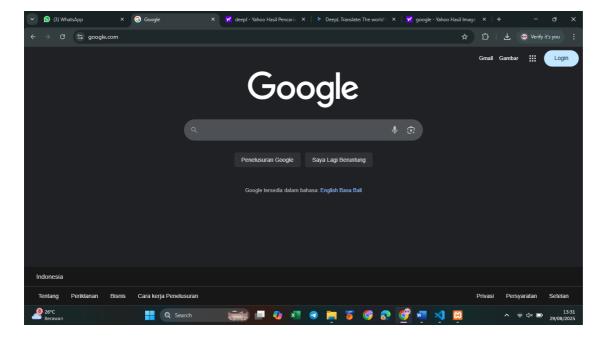
The code above shows how to make the image become a link.



Click the image below to redirect into google



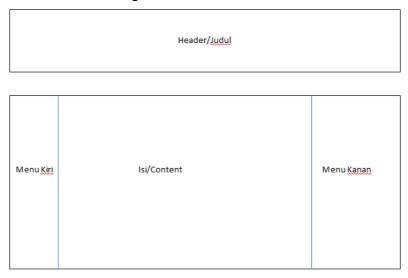
If you click the image, the interface will redirect into www.google.com.



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 tag and ends with the tag.

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

The structure of a table is illustrated in Figure 7.

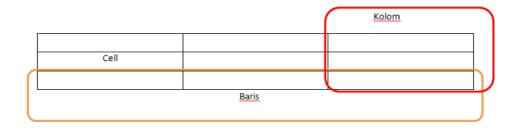


Figure 7. Table Structure

The syntax for creating a table is as follows:

Table Configuration

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

• Attributes for Tabel

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.

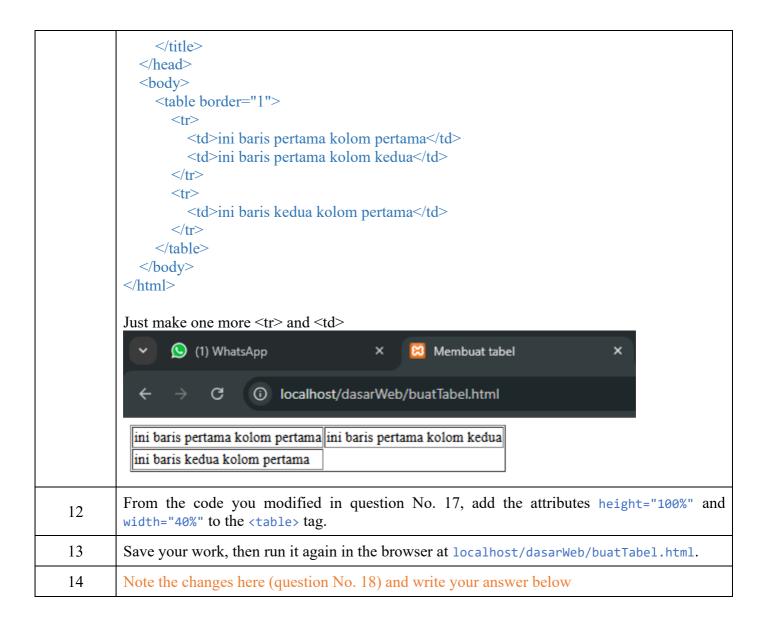
Merger Cell

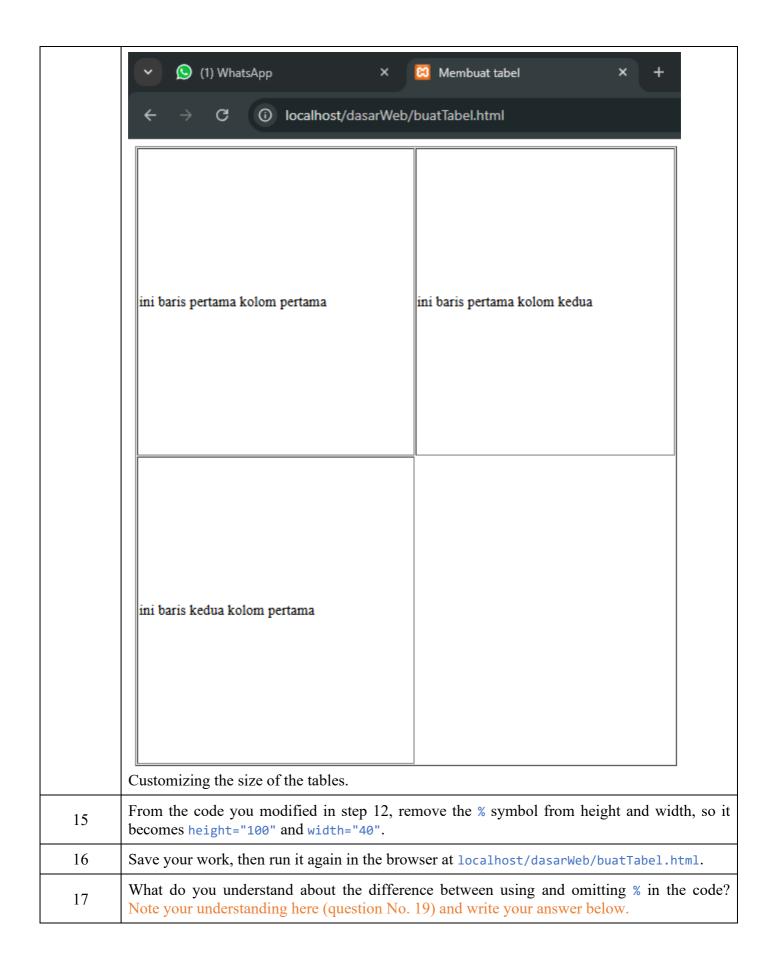
Table cell merging can be achieved using the following attributes:

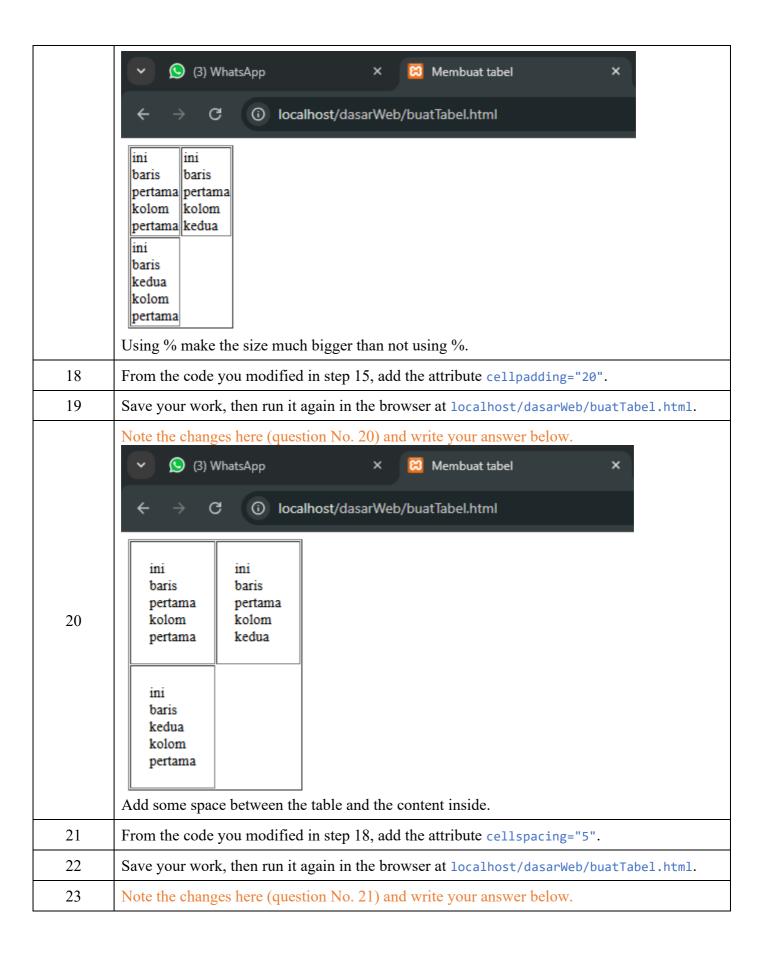
- Rowspan: Used to merge cells across multiple rows. For example, to merge three rows, you would set rowspan="3".
- Colspan: Used to merge cells across multiple columns. For example, to merge three columns, you would set colspan="3".

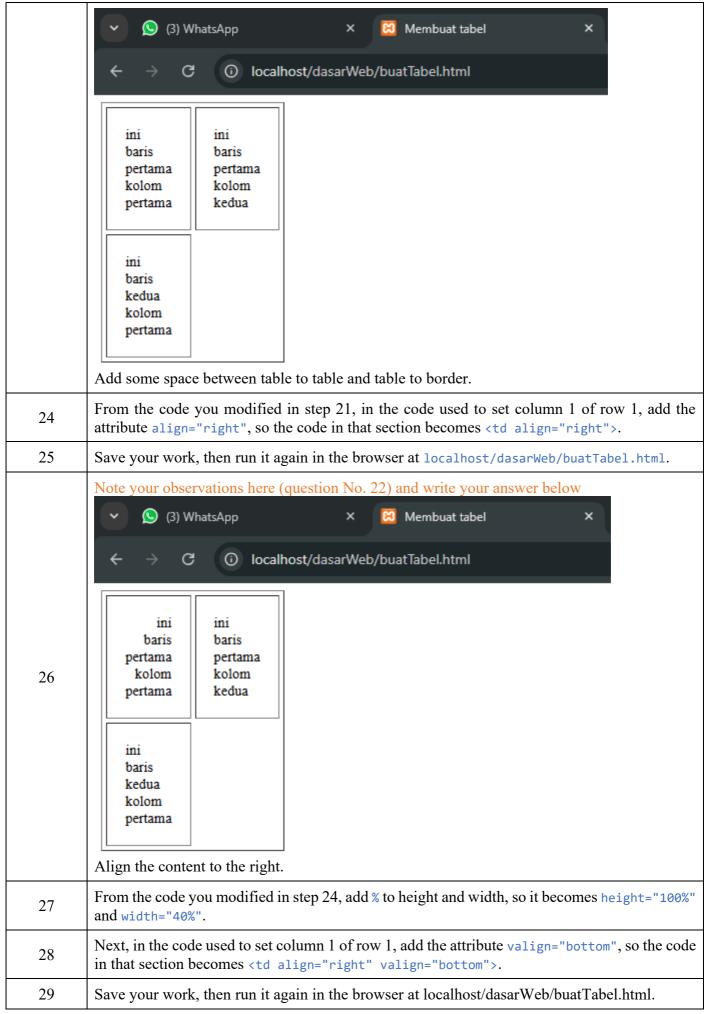
Practical Steps:

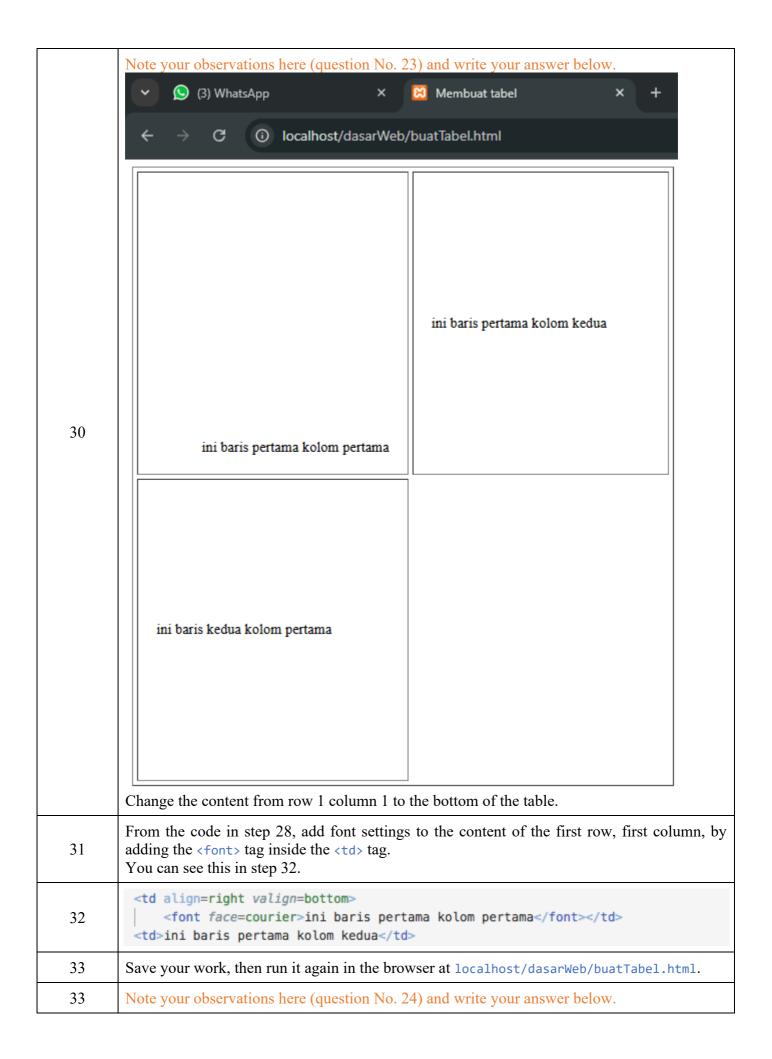


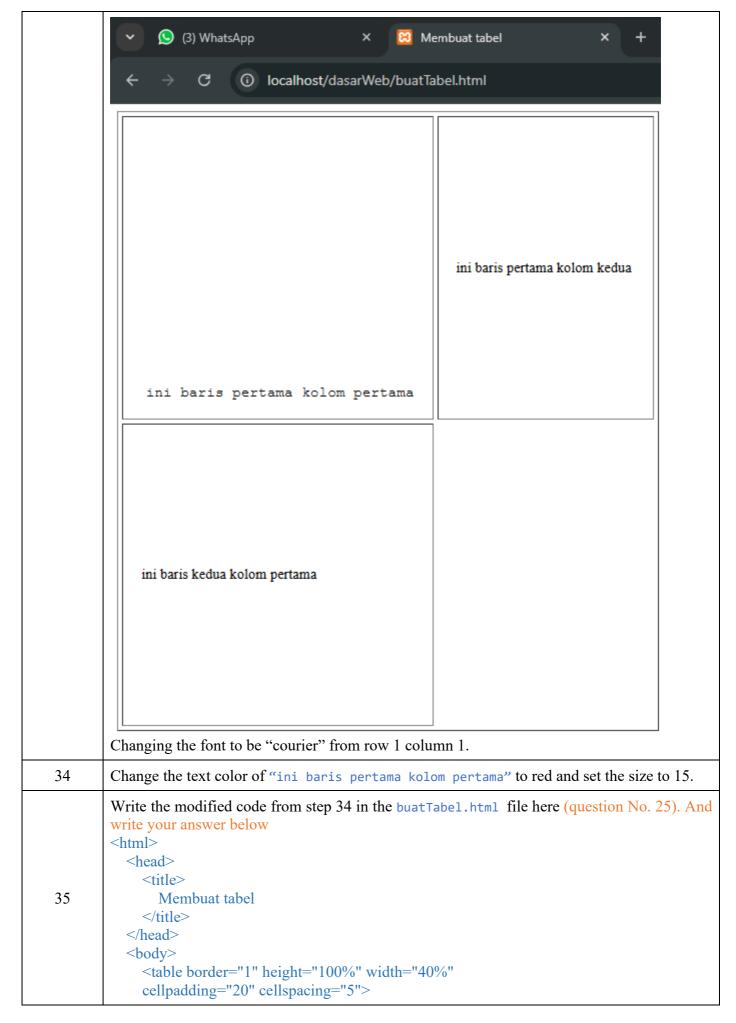






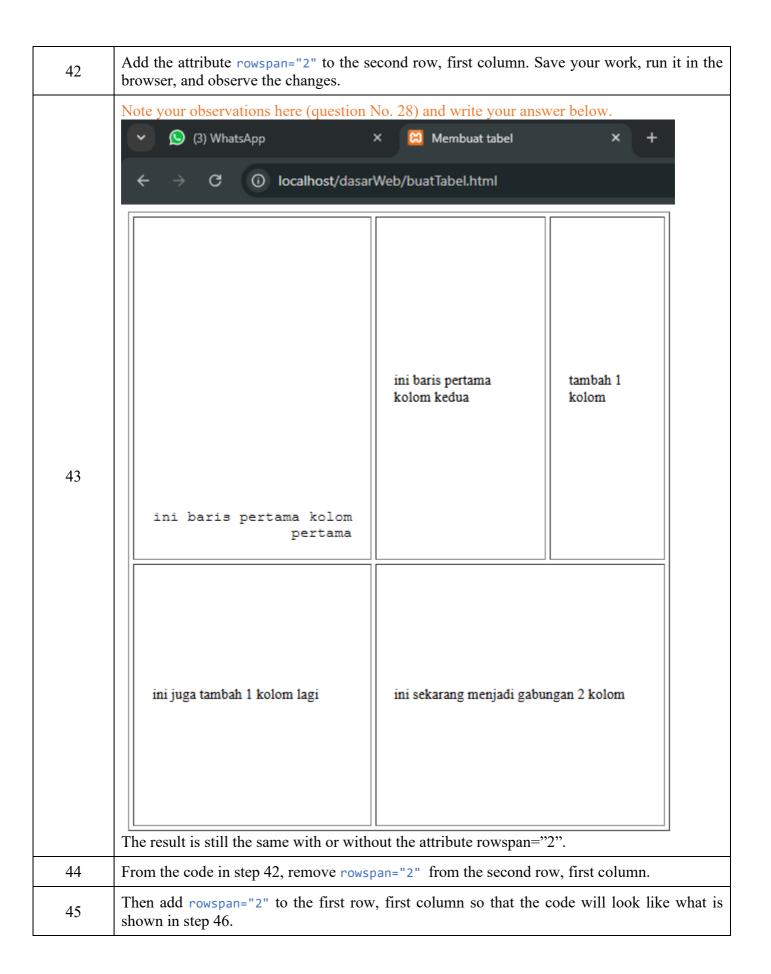






```
<font face=courier>ini baris pertama kolom pertama</font>
              ini baris pertama kolom kedua
            >
              ini baris kedua kolom pertama
          </body>
      </html>
      After completing step 35 in the buatTabel.html code, add the attribute colspan="2" to the
36
      second row, first column, so that the  tag results in a code snippet similar to what is
      shown in step 37.
             <font face=courier>ini baris pertama kolom pertama</font>
                   ini baris pertama kolom kedua
37
                ini sekarang menjadi gabungan 2 kolom
                From the code you completed in step 36, add one more column to the first row, so that the
38
      display will look like what is shown in step 39.
                     ini baris
                               tambah
                     pertama
                      kolom
                               kolom
           ini baris
             pertama
              kolom
             pertama
         ini sekarang menjadi gabungan 2
39
      (question No 26) Write down your code here
      <html>
        <head>
          <title>
            Membuat tabel
          </title>
        </head>
        <body>
          <table border="1" height="100%" width="40%"
          cellpadding="20" cellspacing="5">
```

```
<font face=courier>ini baris pertama kolom pertama</font>
               ini baris pertama kolom kedua
               tambah 1 kolom
             >
               ini sekarang menjadi gabungan 2 kolom
             </body>
       </html>
       Next, add one more column to the second row so that the display will look like what is shown
40
       in step 41.
                      ini baris
                                tambah
                      pertama
                      kolom
                                kolom
                      kedua
            ini baris
             pertama
               kolom
             pertama
                      ini sekarang menjadi
         ini juga tambah 1
         kolom lagi
                      gabungan 2 kolom
       (question No 27) Write down your code here
       <html>
         <head>
           <title>
41
            Membuat tabel
           </title>
         </head>
         <body>
           <table border="1" height="100%" width="40%"
           cellpadding="20" cellspacing="5">
            <font face=courier>ini baris pertama kolom pertama</font>
               ini baris pertama kolom kedua
               tambah 1 kolom
             >
              ini juga tambah 1 kolom lagi
               ini sekarang menjadi gabungan 2 kolom
            </body>
       </html>
```



```
<font face=courier>ini baris pertama kolom pertama</font>
                  ini baris pertama kolom kedua
                 tambah 1 kolom
46
               ini juga tambah 1 kolom lagi
                 ini sekarang menjadi gabungan 2 kolom
            Save your work and run it in your browser. Observe the difference between the code in step 42
47
      and step 45.
       Note your observations here (question No. 29) and write your answer below.
            (3) WhatsApp
                                            Membuat tabel
                 C
                      localhost/dasarWeb/buatTabel.html
                                   ini baris pertama
                                                      tambah 1 kolom
                                   kolom kedua
48
                                   ini juga tambah 1
                                                      ini sekarang menjadi
                                   kolom lagi
                                                      gabungan 2 kolom
            ini baris pertama
                kolom pertama
      It combines 2 row in 1 column to become 1 table
```

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

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

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

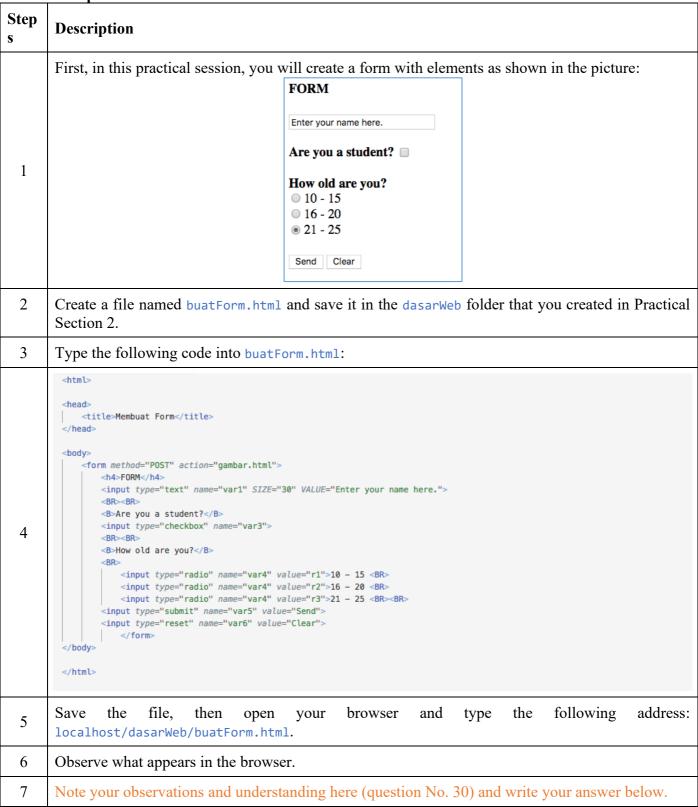
The <textarea> element functions as a form input control for entering multi-line text. This element has attributes such as name, cols, and rows. The name attribute defines the name of the input control for the <textarea> element, the cols attribute defines the number of visible columns in the textarea,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

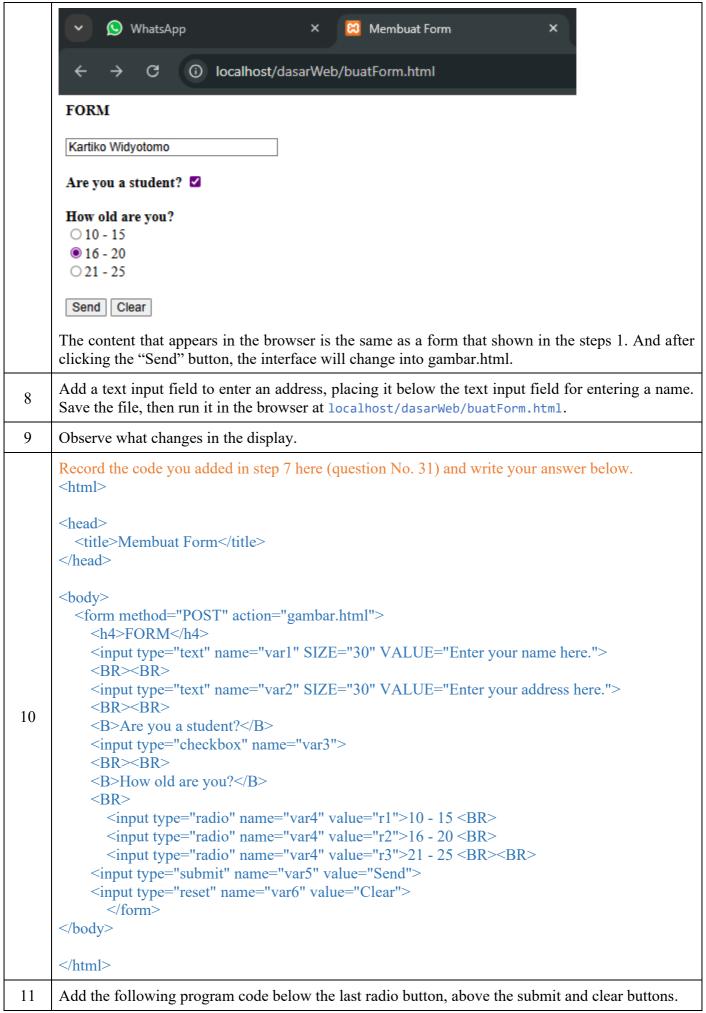
Syntax:

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

</textarea>

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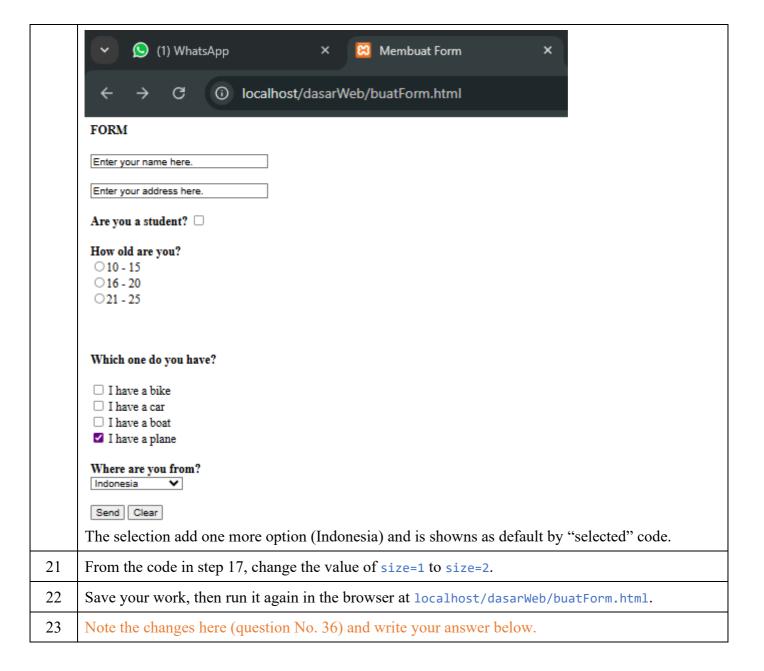


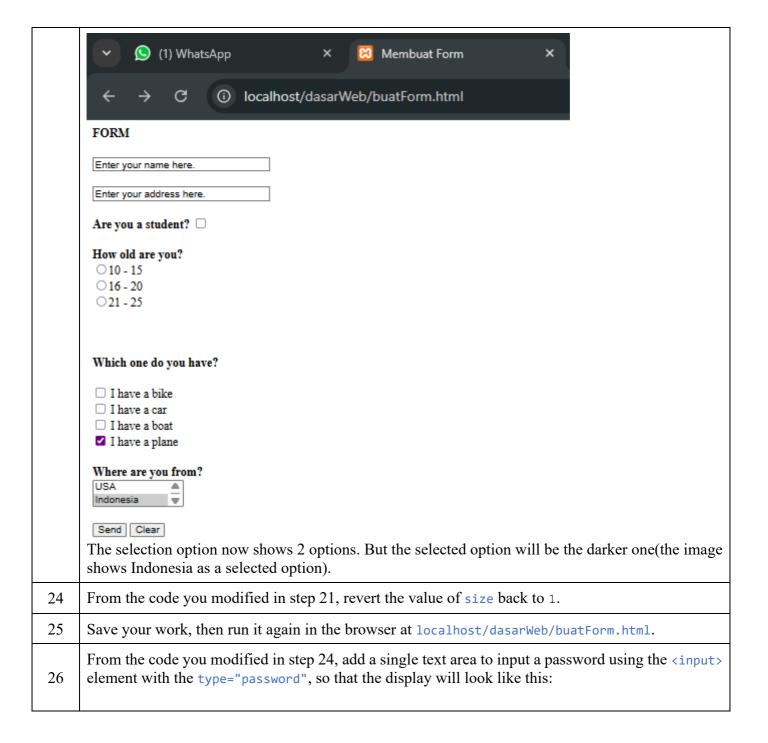


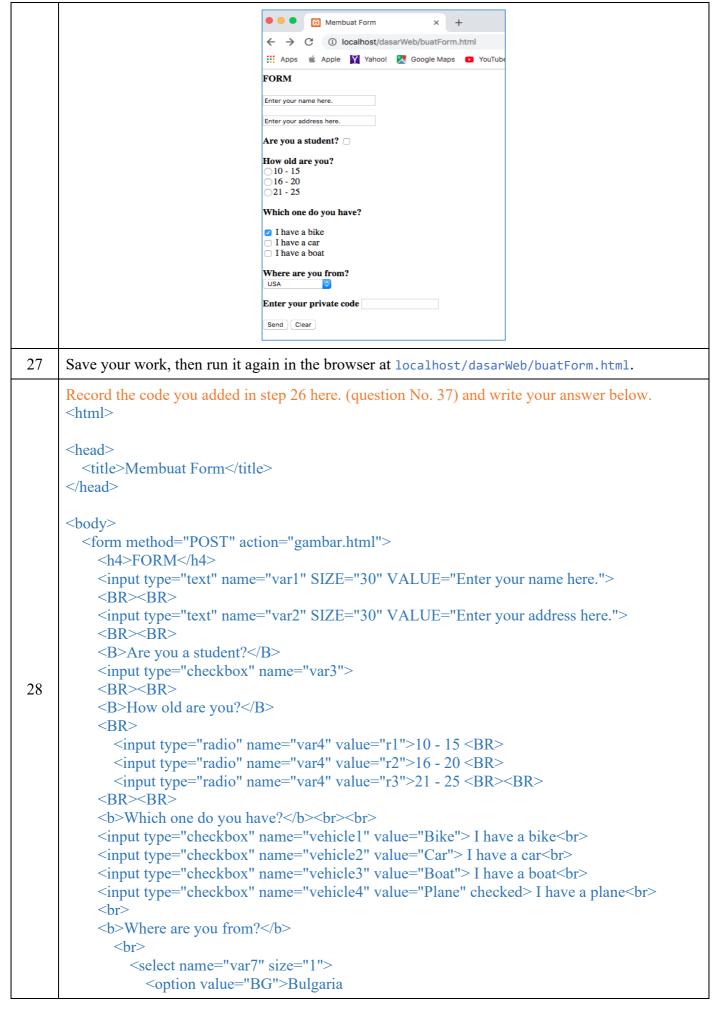
```
<b>Which one do you have?</b><br><br>
        <input type="checkbox" name="vehicle1" value="Bike" checked> I have a bike<bre><bre>
        <input type="checkbox" name="vehicle2" value="Car"> I have a car<br>
        <input type="checkbox" name="vehicle3" value="Boat"> I have a boat<br>
     Does the display in the browser look like the one shown below? (question No. 32).
                                         FORM
                                         Enter your name here.
                                         Enter your address here.
                                         Are you a student?
                                         How old are you?
                                         0 10 - 15
                                         0 16 - 20
12
                                         21 - 25
                                         Which one do you have?

✓ I have a bike
                                         ■ I have a car
                                         I have a boat
                                          Send Clear
     Write your answer here:
     Yeah. Its looks alike.
     From the code you modified in question No. 32, add a checkbox input that displays the option "I
13
     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.
      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
     <html>
     <head>
        <title>Membuat Form</title>
     </head>
     <body>
15
        <form method="POST" action="gambar.html">
          < h4 > FORM < /h4 >
          <input type="text" name="var1" SIZE="30" VALUE="Enter your name here.">
          <input type="text" name="var2" SIZE="30" VALUE="Enter your address here.">
          <BR><BR>
          <B>Are you a student?</B>
          <input type="checkbox" name="var3">
           \langle BR \rangle \langle BR \rangle
```

```
<B>How old are you?</B>
          <BR>
             <input type="radio" name="var4" value="r1">10 - 15 <BR>
             <input type="radio" name="var4" value="r2">16 - 20 <BR>
             <input type="radio" name="var4" value="r3">21 - 25 <BR><BR>
          <BR><BR>
          <b>Which one do you have?</b><br><br>
          <input type="checkbox" name="vehicle1" value="Bike"> I have a bike<br>
          <input type="checkbox" name="vehicle2" value="Car"> I have a car<br>
          <input type="checkbox" name="vehicle3" value="Boat"> I have a boat<br/>br>
          <input type="checkbox" name="vehicle4" value="Plane" checked> I have a plane<br/><br/>br>
          <input type="submit" name="var5" value="Send">
          <input type="reset" name="var6" value="Clear">
             </form>
     </body>
      </html>
      Add the program code from step 17 into the program code you modified in step 13. Place it below
16
     the checkbox configuration and above the button configuration.
       <b>Where are you from?</b>
             <select name="var6" size="1">
17
                <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.
                     what
                             the
                                   code
                                           snippet
                                                      in
             here
                                                           step
                                                                  17
                                                                        means
                                                                                  (how
                                                                                               works).
     (question No. 34) Write your answer below.
19
     It works like a selection type input and what shown after you click is the place where the users come
     from.
     From the code you modified in step 17, add one more country option, "Indonesia," and set
19
      "Indonesia" as the default selected option.
20
     Save your work, then run it again in the browser at localhost/dasarWeb/buatForm.html.
      Note the changes here (question No. 35) and write your answer below.
20
```

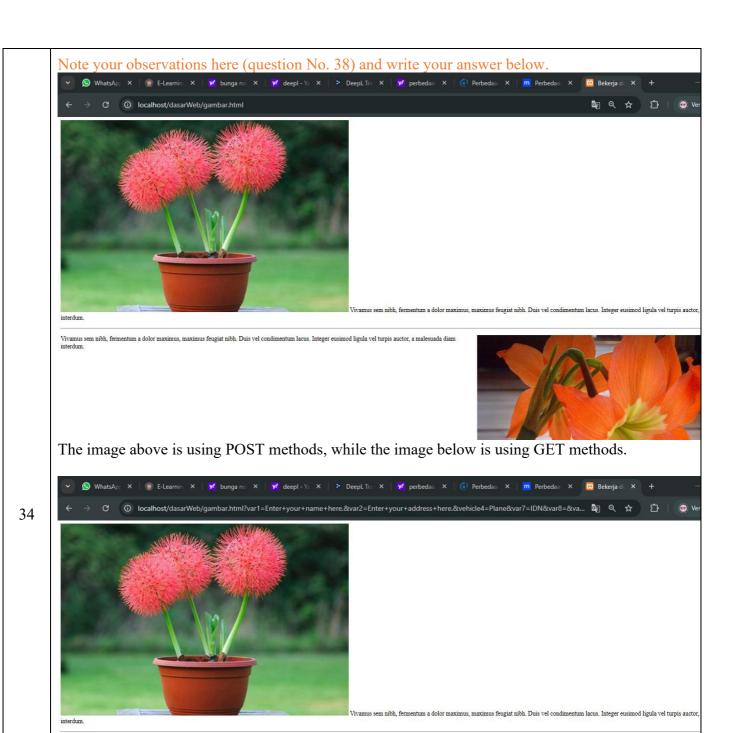






```
<option value="UK">United Kingdom
                  <option value="USA">USA
                  <option value="IDN" selected>Indonesia
                </select>
           <br/>br><br/>><
           <br/>b>Enter your private code</b>
           <input type="text" name="var" SIZE="30" VALUE="">
           <BR><BR>
           <input type="submit" name="var5" value="Send">
          <input type="reset" name="var6" value="Clear">
             </form>
      </body>
      </html>
     From the code in step 28, add a text area for typing long comments using the <textarea> and
      </textarea> tags, so that the display will look like this:
                                          Membuat Form
                                                                       +
                                     → C ① localhost/dasarWeb/buatForm.html
                                  Apps 🐗 Apple 🝸 Yahoo! 🎇 Google Maps 🔼 You
                                 FORM
                                 Enter your name here.
                                 Enter your address here.
                                 Are you a student?
                                 How old are you?
29
                                 0 10 - 15
                                 0 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?
                                 Enter your private code
                                 Enter your comment
                                 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
      <html>
      <head>
        <title>Membuat Form</title>
31
      </head>
      <body>
        <form method="POST" action="gambar.html">
```

```
<h4>FORM</h4>
          <input type="text" name="var1" SIZE="30" VALUE="Enter your name here.">
          <BR><BR>
          <input type="text" name="var2" SIZE="30" VALUE="Enter your address here.">
          <BR><BR>
          <B>Are you a student?</B>
          <input type="checkbox" name="var3">
          <BR><BR>
          <B>How old are you?</B>
          \langle BR \rangle
             <input type="radio" name="var4" value="r1">10 - 15 <BR>
            <input type="radio" name="var4" value="r2">16 - 20 <BR>
            <input type="radio" name="var4" value="r3">21 - 25 <BR><BR>
          \langle BR \rangle \langle BR \rangle
          <b>Which one do you have?</b><br><br>
          <input type="checkbox" name="vehicle1" value="Bike"> I have a bike<br>
          <input type="checkbox" name="vehicle2" value="Car"> I have a car<br/>br>
          <input type="checkbox" name="vehicle3" value="Boat"> I have a boat<br/>br>
          <input type="checkbox" name="vehicle4" value="Plane" checked> I have a plane<br/><br/>br>
          <br>
          <b>Where are you from?</b>
             <hr>>
               <select name="var7" size="1">
                 <option value="BG">Bulgaria
                 <option value="UK">United Kingdom
                 <option value="USA">USA
                 <option value="IDN" selected>Indonesia
               </select>
          <br>><br>>
          <br/>b>Enter your private code</b>
          <input type="text" name="var8" SIZE="30" VALUE="">
          <BR><BR>
          <b>Enter your comment</b><br>
          <textarea type="text" name="var9" SIZE="30" VALUE="Fill this area"></textarea>
          <BR><BR>
          <input type="submit" name="var5" value="Send">
          <input type="reset" name="var6" value="Clear">
            </form>
     </body>
     </html>
     Notice that the <form> tag includes the attribute method="POST". Run the form again in the browser
32
     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.
     Open the buatForm.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.
33
     Compare and note the differences between the GET and POST methods based on what you observe.
```



Vivamus sem nibh, fermentum a dolor maximus, maximus feugiat nibh. Duis vel condimentum lacus. Integer eusimod ligula vel turpis auctor, a malesuada di



The difference between the GET and POST methods based on what I observed is when the user use method="POST", after you click send button (when you have fill all the forms) the data is saved in the web but the data won't be shown in the URL. While using method="GET", after you click send button (when you have fill all the forms) the data is saved in the web but the data will be shown in the URL.

References:

1. Jason Beaird, The Principles of Beautiful Web Design

- Rian Ariona, Belajar HTML dan CSS (Tutorial Fundamental dalam mempelajari HTML dan CSS)
 Adi Hadisaputra, HTML dan CSS Fundamental dari Akar menuju Daun
- 4. John Duckett, HTML and CSS: Design and Build Websites