HTML NOTE

software

A=10
B=20
C=a=b
Print(c)
d-=a-b

add.py

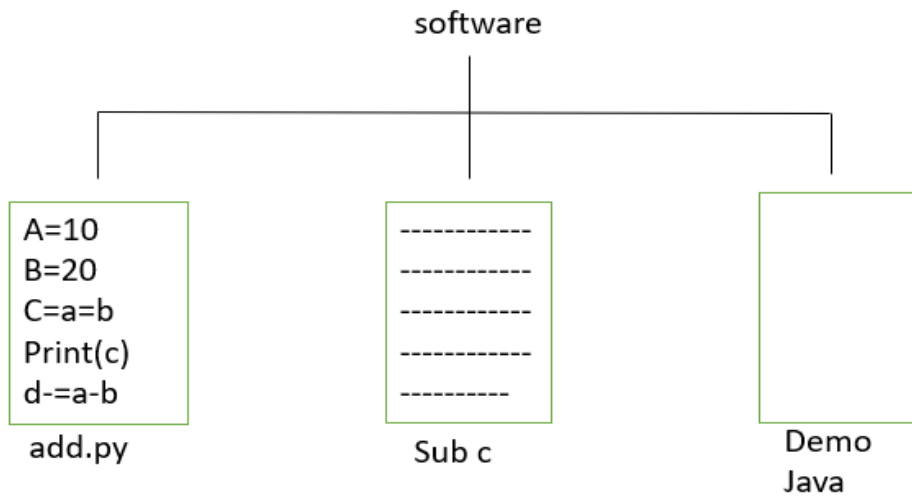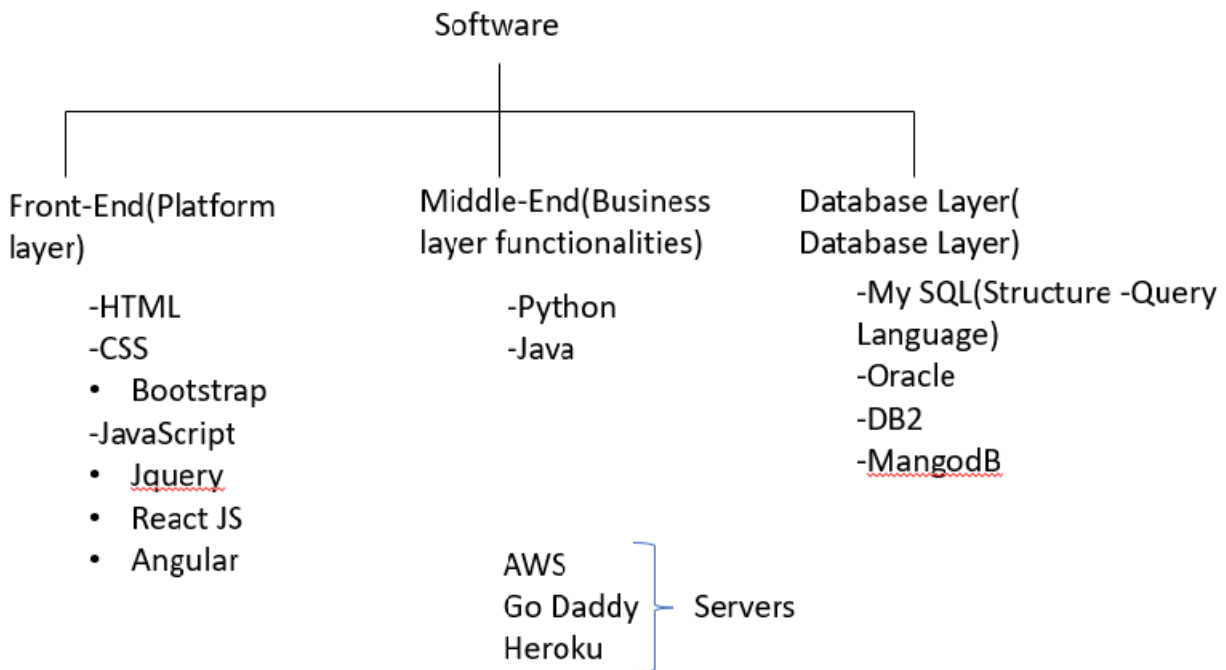-----------
----

Sub c

Demo
Java

Software: is a collection of programs.

Program: is a set of instructions or statements which are used to perform specific task.

Software

Front-End(Platform layer)

-HTML
-CSS
- Bootstrap
-JavaScript
- Jquery
- React JS
- Angular

Middle-End(Business layer functionalities)

-Python
-Java

AWS
Go Daddy ⊢ Servers
Heroku

Database Layer(Database Layer)

-My SQL(Structure -Query Language)
-Oracle
-DB2
-MangodB

- A person whose duty is to develop or work on frontend is called as Frontend Developer, UI Designer or Frontend Engineer.
- A person whose duty is to write the functionalities is referred as developers.

- A person whose duty is to write the SQL Query to perform database operations is referred as Database administrator (DBA) or Database Engineer.
- A person whose has a knowledge on Frontend, Middle Wave and Database is referred to as full stack developer.

History of HTML

✓ HTML was developed by Tim Berners Lee in the year 1991, but it was officially released in the year 1993.

✓ HTML is developed based on the certern rules and regulation set by ISO(International Organization for standardilization).

✓ The entire rules and regulation is designed in SGML(Standard Generalized Markup Language).

✓ He develpoed SGML to share the information in well formated web pages.

✓ HTML stands for Hyper Text Markup language.

Hypertext: It is basically used to negivate from one webpage to another web page or within the same page.

Text: It is the context that has to be displayed on the webpage.

Markup: It is basically used to provide a proper structure and well formated text that needs to be displayed on the webpage.

Versions of HTML

1. HTML 1.0- 1993(18 Tags)
2. HTML 2.0- 1995
3. HTML 3.02- 1997(developed by WBC[world wide web consorium])
4. HTML 4.01-1994 to 2014
5. HTML 5- 2014

HTML Features

- Portable Language
- Loosely Coupled Language: are those language whose errors are ignored during the execution time.
- All browser supported- Most of the text in HTML are supported by all webbrowsers.
- Not case sensetive.

Limitation of HTML

- Has less designing capabalities; depends on CSS or other library for designing.

- No programing functionalities.

♣In order to execute HTML program we require a text editor and web browser.

- Example of web browser: Chrome, Firefox, Opera, Edge, Etc.

Structure of HTML

<!DOCTYPE HTML>

<html>

    <head>

       Meta information

    </head>

<body>

    "body"

    Content to be displayed on web page.

</body>

</html>

<!DOCTYPE HTML>

❖ Is used to define the version of HTML to the web Browser.

<html> Tag

❖ Is considered to be the root element of the html document. All the other tags should be enclosed within opening and closing of html tag, except <!DOCTYPE HTML>.
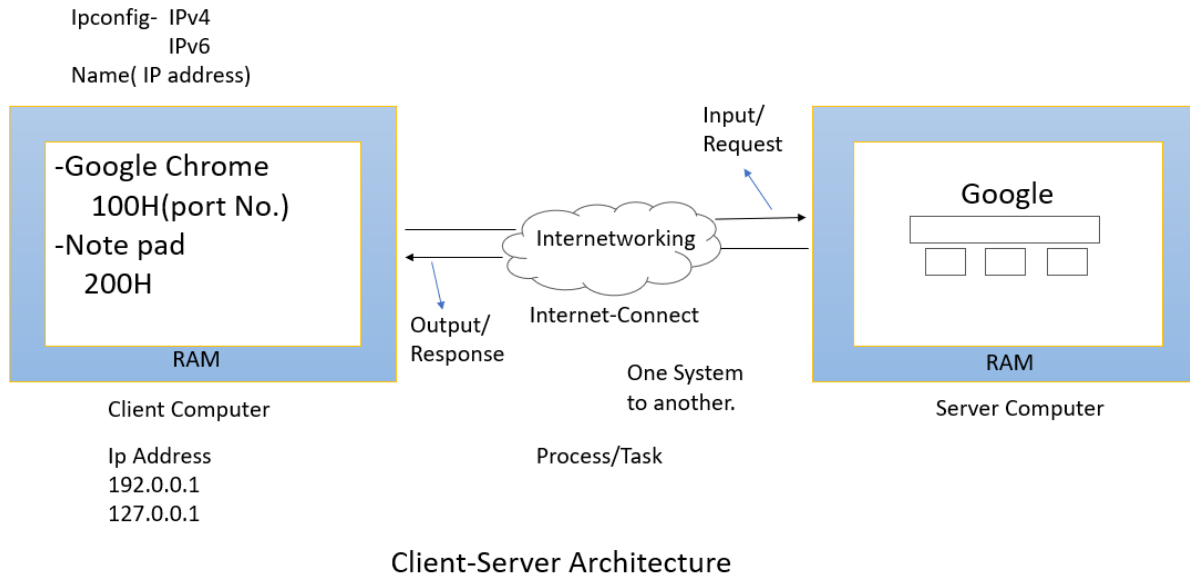
<body> Tag

❖ The content that has to be displayed on the web page should be enclosed within body tag.

<head> Tag

❖ It consist of meta information about the html document.

Meta: A small piece of information that describes the entire web document.

Ipconfig- IPv4
IPv6
Name(IP address)

Input/Request

-Google Chrome
100H(port No.)
-Note pad
200H

Internetworking

Google

RAM

RAM

Client Computer

Output/Response

Internet-Connect

Server Computer

Ip Address
192.0.0.1
127.0.0.1

One System
to another.

Process/Task

Client-Server Architecture

Port No:

o   My SQL: 3306
o   http: 80(80 80)
o   https: 43
o   django: 8000

IP address: Referrs to the name of the computer over the internet. In order to check the name of the computer on the windows operating system the command is ipconfig.

➢   For linux the command is ifconfig.

Process: Any program that is executing in RAM segment, is technically referred as process. Process is also called as Task.

Port No: Any program that is excuting in RAM segment, an address is allocated by operating system, this is called as Port No.

➢   Port No is also called as Process No or Process ID(PID)

Port collision: When two program try to execute on the same port no a collision occurs, this collision is referred as Port Collision.

Client Computer: A Computer that always ask for the information.

Server Computer: A Computer that always provides the information.

Response: The output that has been provided by the server computer to the client computer.

There are Two types of Response:

1.   **Static Response:** are those response which are not varied from one person to another person over a period of time to time.

        Example: Login page of Gmail.

2.   **Dynamic Response:** are those response which are varied from one person to another person over a period of time to time.

        Example: Inbox of Gmail Account.

HTML supports two types of Tags.

1.   **Paired tags:** are those tags which contains opening tag as well as closing tag.
➢   Closing tags are also called companion tags.
➢   Paired tags are also called container tags.
2.   **Unpaired tags:** are those tags which has a opening tag but no closing tag.
➢   Unpaired tags are also called empty tag, stand alone tag, singular tag or self closing tag.

Utility Tag: based on the usage of paired and unpaired tag we can further classify tags into 3 catagories.

1)   **Formating Tags:** Are those tags which are used to modify a particular text or regular text such as bold, italic, strong, etc.
2)   **Structure Tags:** Are those tags which are used to provide proper structure to the html documents.
3)   **Control Tags:** Are those tags which are used in managing the content or managing the scripts from external source.

Title tags: is used to provide title to the web document or web page.

Q. Write a program to display the title on the web browser?

Ans. <!DOCTYPE HTML>

<html>

      <head>

          <title>any title</title>

</head>

</html>

▪   If the user is not providing any title than by defualt the file name would be the title for the document.

Q. Write Program to add image to title bar?

Ans. <!DOCTYPE HTML>

<html>

        <head>

            <title>any title</title>

            <link rel="icon" href="location of the image">

        </head>

</html>

- In order to add the image to title bar we must make use of link tag.
- Link tag is a unpaired tag.

Heading tags: are used to provied a heading to the html document, however html supports 6 heading tags:

a) <h1> <h1>- Important
b) <h2> <h2>
c) <h3> <h3>
d) <h4> <h4>
e) <h5> <h5>
f) <h6> <h6>- Least Important

Q. write a program to show head Tag?

Ans. <!DOCTYPE HTML>

<html>

        <head>

        <title>KING OF FOOTBALL</title>

      </head>

       <body>

         <h1>lieonal Messi</h1>

         <h2>early life</h2>

         <h2>Club carrer</h2>

         <h3>barcelona</h3>

         <h4>ballon D'OR</h4>

         <h3>PSG</h3>

</body>

</html>

- ▪ h1 is the most important heading and bigger in font size.
- ▪ h6 is the least important heading and has the smallest font size.
- ➢ Heading tags are paired tags.
- ♣ Note: a web document can contain many h1 tags, but as per the standardization we must make use of it only once in the entire web document.

Paragraph tag: is basically used to provide the content in the form of paragraph on web document.

- • Paragraph tag is a paired tag.
- ♣ Note: all the extra white space that are provided by the user is ignored by the web browser during the excution time.

Q.write a program to show Paragraph tag?

Ans. <!DOCTYPE HTML>

<html>

        <head>

        <title>PARAGRAPH</title>

    </head>

      <body>

        <h1>Paragraph Tag</h1>

        <p>This is paragraph 1.

        <p>This is paragraph 2. </p>

        <p>This is paragraph 1.</p>

        <p>This is paragraph 2.</p>

        <p>This is Paragraph 1.

        This is paragraph 2. </p>

      </body>

</html>

Horizontal tag: is basically used to draw an horizontal line from one end to another end of web page.

Q.Write a program to show horizontal tag?

Ans. <!DOCTYPE HTML>

<html>

    <head>

    <title>KING OF FOOTBALL</title>

  </head>

   <body>

    <h1>lieonal Messi</h1>

      <u>\<hr></u>

    <h2>early life</h2>

    <h2>Club carrer</h2>

    <h3>barcelona</h3>

    <h4>ballon D'OR</h4>

    <h3>PSG</h3>

   </body>

</html>

Break tag/ A line break element: is used to break a particular line or paragraph and move the control or remaining text to new line.

Q. Write a program to show Break tag?

Ans. <!DOCTYPE HTML>

<html>

    <head>

    <title>KING OF FOOTBALL</title>

  </head>

   <body>

    <h1>lieonal Messi</h1>

<p> HE IS A LEGEND.**<u>\
</u>**

 HE IS THE HIGHEST GOAL SCORRER IN SOUTH AMERICA</p>

    <h2>early life</h2>

<h2>Club carrer</h2>

        <h3>barcelona</h3>

        <h4>ballon D'OR</h4>

        <h3>PSG</h3>

    </body>

</html>

Bold Tag

- In order to make a particular text or a sequence of text bolder we must make use of bold tag.
- is the tag used for bold text.
- Bold Tag is a paired tag and it belongs to formatting tag.

Q. Write a program to show bold tag?

Ans. <!DOCTYPE HTML>

<html>

        <head>

        <title>BOLD TEXT</title>

    </head>

    <body>

        ****"LAND OF THUNDER DRAGON"****

        </body>

</html>

Italic tag

- In order to make a particular text italic or a sequence of text italic we must make use of <i> tag.
- Italic tag is a paired tag as well as formatting tag.
- Underline tag
- In order to make a text or a sequence of text underlined we must make use of <u>tag.
- Underline tag is a paired tag as well as formatting tag.

Q. write a program to show italic and underline tag?

Ans. <!DOCTYPE HTML>

<html>

```
    <head>

        <title>Italic and Underline tag</title>

   </head>

     <body>

     <u><i>"LAND OF THUNDER DRAGON"</i></u>

     </body>

</html>
```

<strong> tag

- Bold tag and italic tag are old(legacy) way of making a text bold and italic.
- The new way of making a text bold is by making use of <strong> tag. And to make the text italic we must make use of <em>tag. em tag stands for emphasis.

Nested tag: One tag that is present within another tag is referred to as nested tag.

Example. <html>

```
        <head>

 </head>

     <body>

<p>paragraph

<strong>hello

<em>

<u>

     "LAND OF THUNDER DRAGON"

</u>

</em>

</strong>

</p>

     </body>

</html>
```

<strike>tag

- Strike is basically used to draw a horizontal line over a particular text or sequence of text.

- It is a paired tag.

Q. Write program to show strike tag?

Ans. <!DOCTYPE HTML>

<html>

<head>

    <title>strike</title>

    </head>

  <body>

    I LOVE BHUTAN and <strike>not</strike> you

    </body>

</html>

<del> tag

Delete tag: is used to draw a horizontal line over a particular text or a sequence of text.

- It is a paired tag.

Q. Write program to show delete tag?

Ans.<!DOCTYPE html>

<html>

<head>

    <title>delete</title>

</head>

<body>

    <P>I ~~LOVE~~ YOU</P>

</body>

</html>

Insert tag

In order to provide an alternative text for the strike element, we must make use of insert tag.

- By default, the text inside the <ins> tag would be underlined.

Comment text

- Comment statement are those statements which are ignored by the web browser during the execution time.

<!—comment—>

Super script

- Are those elements which is used to display a particular text above the normal text.
- It is represented as <sup> tag

Sub script

- The text which is always below a normal text is referred to as subscript elements.
- It is represented as <sub> tag.

Quoted tag

- In order to represent a text as a quote we must enclose the text within <q> tag.

Preformatted tag

- It is basically used to display the contents on the web page that is exactly present on the html document.

Mark tag

- Is used to highlight a particular text or a sequence of text by providing a background color.
- The default background color is yellow.

Big tag

- Is basically used to display the text bigger than the normal text.

Small text

- Is basically used to display the text smaller than the normal text.

Attributes

- Are basically used to provide additional information to a particular tag.
- The attribute information should always be present within the opening tag only.
- A single tag can contain multiple attributes.

Example: attribute name=" attribute value"

Attribute style=" property: value"

Image tag

- Is basically used to add an image to the web page.

Syntax: <img src="location of image" alt="alternative value">

Cases

1. D:\html\image html\image name
2. D:\html\image html\image file
3. D:\html\image html\images\image file
4. C:\image\image name/ D:\html\image html

Note:

- Src stand for source in html. It is basically used to specify the url of an image or a file.
- Alt stand for alternative message in html. It is basically used to provide an alternative message if the image is not found.
- If the image is found the alt attribute value would not be displayed in the web page.
- In order to resize the image, we have to specify the height and the width attribute inside the <img>tag.

Marquee Tag

- It is basically used to move the text horizontally from one end of the web page to the another.
- By default, the text moves from left to right.
- In order to change the direction, we must make use of direction attribute.
- By default, the transaction speed 85ms, the minimum speed value 60ms.
- 1000ms is equal to 1 second.

Loading the image directly from the web browser

- In order to load the image from the web browser we must copy the image address and specify it in src attribute.

Steps

1) Open the image on the web browser
2) Right click on the image
3) On the drop down we would find copy image address
4) Click on the copy image address.

Specifying color in html

Giving color name directly

Example: red, blue, yellow, etc.

RGB (Red, Green, Blue)

Red (255,0,0)

Green (0,255,0)

Blue (0,0,255)

White (255,255,255)

Black (0,0,0)

RGBA (A stand for alpha ranging from 0-9)

Example: (255,145,10,01)

Hexadecimal (09, A-F)

Example: #ff140a

**Giving space: **

Anchor Tag

- Anchor tag is basically used to navigate from one web page to another web page withing the same window or in the new window.
- By default, the web page loads within the same window.
- In order to open the web document in the new window we must make use of target attribute and the value _blank.
- By default, the value of target attribute is _self.

Within the same window

-

Specific content within same page

-
-

Specific content within another window

-

Navigating file

- <a name: "anchor name>

Add multiple color to the web page

- In order to add multiple colors as a background we must make use of style attribute within the body tag, inside the style we have one property called as background-image: , the value for background image property can be linear-gradient() function or radial-gradient () function.

Syntax: Linear-gradient (direction/angle of degree, color 1,color 2….color n)

Adding a background image with multiple color

- In order to add an image at the background along with multiple colors we must make use of linear gradient and url function

Syntax:style=" background-image "linear-gradient(), url('')")

Nav bar:

- Is basically used to specify the anchor tags inside it for navigating purpose.

Lists in html

Html supports 3 types of lists

1. Ordered list
2. Unordered list
3. Definition list

Unordered list: is a collection of related items, which doesn't have a order of sequence

- We must make use of <ul> tag.

Ordered list: In order to represent the list of elements with a number we must make use of ordered list.

- It is represented as <ol> tag

Dl list: Dl stands for definition list.

- It consists of two other tags

<dt> and <dd> tag

- **Dt** stands for definition term
- **Dd** stands definition data or description data.
- **Dd** is used to provide the description for dt.

Nested list

- One list which is present within another is referred as nested list.

Cases

1. Ordered list present in unordered list
2. Unordered list within ordered list
3. Unordered list within unordered list
4. Ordered list within ordered list

Note:
- By default, number is value for ordered list
- For unordered list the default value is disc.

Note
- In order to change the default values of ordered list and unordered list, we must make use of "type" attribute.

Different values for ordered and unordered lists are:

♣Ordered list
- Roman number: i, ii, iii (lower)
- I, II, III (upper)
- Alphabets: a, b, c (lower)
- A, B, C (upper)
- Numbers (Decimal)

♣Unordered list
- Disc
- None
- Circle
- Square

<Table> tag

<tr> tag

- Tr represents table row

<td>

- Used to insert the data in the table row.

<caption>

- It is used to describe the table.

\<th\> tag

- Stands for table heading, it is used to insert the heading inside the table
- The data of the \<th\> tag is bolded compared to \<td\> tag

\<thead\> tag

- The \<th\> Should always be written inside the \<thead\> tag.

\<tbody\>

- The body of the table should always be present within \<tbody\>.

Rowspan

- It is basically used to merge the row.

Colspan

- It is basically used to merge the column.

Block level element:

- Are those elements which occupy the complete block on the web page.

Inline element:

- Are those elements which doesn't occupy the entire block and doesn't force the control to move to the new line.

\<div\> tag

- It is basically used to group the element into a single block.
- Float attribute is use to move the div block over the webpage.
- Margin attribute is use to move block up, below, right or left.
- Padding is used to move the content inside the block.

Input tag

- Is used to take the input from the user.

Form tag

- The form element provides a document section in order to take the input from the user.

Type attribute

- The type attribute is used to define the input type.

The values of type attributes are:

Text: it allows us to enter the sequence of text such as alphabets, numbers and special characters.

Numbers: it allows the user to enter only the number inside the input tag.

Password: password value is used to encrypt the text.

Email: email value is used to specify the email id inside the input box.

Checkbox: is used to select one or more entities(options).

Radio: basically, it is used to select only one option from the given set of entities.

- We need to group the set of entities as a single block using **name** attribute.

File: it is used to upload a file from the web page.

Text area: the text area is used to insert multi line text in the form.

- We can increase the size of text area by using **rows** and **cols** attribute.

Submit: it is used to add a submit button on the webpage in order to submit the form.

Reset: it is used to reset the form.

Select tag: is used to select a single value from the drop-down menu, if the user wants to select multiple options, he must specify one value inside the select tag as **"multiple"**

Date: it is used to specify the date format on the web page.in order to specify both date and time user must specify datetime-local as a value to the type attribute.

Place holder: it is used to provide a watermark inside the input box

Input tag: required in order to make a specific field mandatory for the user to enter we must make use of required value inside input tag.

To send mail in html:

- <a href="mailto: emailadderss,emailaddress?cc=emailed>

<Object> Tag

- Is used to embed multiple file format on the web page.
- The same operation an also be achieved using <**embed> tag.**
- Embed tags are unpaired tag, where as objects tags are paired
- The attribute of object tag is **data** whereas for **src** is attribute for embed tag

I frame tag

- We also have one more tag which is used to display multiple file format on web page, referred as iframe tag
- Iframe tag are dynamic in nature where as object and embed tag ate static
- We can also embed /load YouTube video and google maps on the web browser with the help of Iframe tag.