CSS

CSS Stands for Cascading Style sheets.
↳ It controls the presentation of the web pages.
↳ It extension is .css
↳ Its frame works are Bootstrap & Tailwind CSS

→ Advantages of CSS
↳ Pages load faster : You can write HTML tag & attribute. Just in one in CSS and can apply to all other occurences
→ So less code means faster website download times.

→ CSS works
↳ It has 3 main Rule or parts.
i> Selector : It defines which HTML elements will be CSS applied, like <h1> <table> any element.
ii> Property :- This helps developer to style the elements of html (eg: color, font-size, margin, padding).
iii> Value : The property you want to Apply for the given html elements eg : Red, blue, 16px → It all apply or property.

Types of CSS

-> Its not we can say type its a method, with that we can put CSS into HTML.

↳ There are 3 types.

i) Inline css
ii) External css
iii) Internal css

i) Inline CSS :

It is used to style single element using <style> attribute.

Syntax:

```
<html>
  <head>
  </head>
  <body>
    <h1 style:" color:red;"> This in Inline
    in CSS </h1>
  </body>
</html>
```

-> This is how we ~~can~~ can gave style, but this is not a appropriate thing to style.

-> If we style like this your code will become ~~hectic~~ hectic to you to understand.

-> So usually people avoid mostly Inline Styling.

ii) Internal CSS

In this styling code is done in head part only.

Syntax

```
<html>
  <head>
  <style>
    body {
        h1 { color: red margin-left;
    }
  </style>
  </head>
  <body>
  <h1> The internal style sheet is applied to the heading </h1>
  </body>
  </html>
```

iii) External CSS

In this we write a code in ~~def~~ different file and connect it with HTML in head by anchor tag <link href = "/style.css">

This type of format is mostly used because it helps coder to design properly.

P-T-O

Syntax

```
<html>
  <head>
    <alink rel="stylesheet" type="txt/css"
    href="styles.css">
  </head>
  <body>
    <p> This is External css example </p>
  </body>
</html>
```

↳ different css file.

```
p{
color : navy;
margin-left: 20px;
}
```

-) This is how you can link your file.

↳ Another way to link external file in HTML.

```
<head>
  @ impo "URL";
</head>
```

This is used to import from online site

* CSS Selector *

↳ Selector are used to select the content on which we can perform styling.

↳ It is a set of CSS sets of rule.

↳ There are several selectors.

1) CSS Element Selector.
2) CSS Id selector.
3) CSS class selector.
4) CSS universal selector.
5) CSS Group selector.
6) CSS Descendent Selector.
7) CSS child selector or Direct child selector.

---

1) CSS Element Selector *

By Name only we can understand that it uses elements tags to apply CSS.

→ with <p>, <h1>, <b> and many more elements even body tags is also used in this selector.

↳ Syntax

<P> Html This Tag uses Element Selector </P>

CSS

```
P{
  Color: Red;
  background color: Brown;
                    Yellow
}
```

This is How we can apply Element selector. and if P is tag there more in html it will apply the CSS to all <P> tags.

2> Id Selector * (#)

we can call Id also attribute because it uses in elements.

-> It select element specific to apply CSS.
-> An college Id is unique like your Roll no is not matched with other,
-> exactly id selector is works same it is unique type.
-> It uses (#) to stand id in CSS file.
-> Example

Syntax

```
<P id="line-one"> This Tag uses ID selector</P>
<P> This Tag does not uses ID Selector </P>
<P>                 "                  </P>
```

In CSS.

```
#line-one{
    color: yellow;
    background color: Black;
}
```

The Result you will see that only the tag 1 we have given is got applied CSS, while other acts as same paragraph tags.

3) CSS class Selector * (.) dot

Tail Wind

→ It start [.name of class selector] this is how we can apply CSS in class.

→ In class we can apply CSS to one or more element at a same time.

→ It provide you to use its for multiple time to avoid you to write the code 2 times.

Note class cannot be start with number.

→ Example

Syntax: <P> This Tag does not uses class seletor </P>
<P class = "sel" > This Tag uses class seletor </P>
<P> This Tag does not uses class selector </P>
<P class = "sel"> This Tag uses class seletor </P>

In css file.

```
.sel{
    color : aqua;
    background color: black;
}
```

The Result you will see that it will apply to P. of line 2 & 4.

→ with this we can save code and space.

→ If you want to apply only one tag element.

then p.center { } | we can use this to apply for only one element.

4) CSS Universal Selector * (*)

→ It uses (*) to select to apply CSS, In this it will apply CSS to all tags, elements present in the HTML file.

→ Example Syntax

```
<h2> This is Heading </h2>
<p> This style will applied to all
    tag and Heading </p>
<p> Me Too !! </p>
<p> And me! </p>
```

```
* {
  color: Red;
  background: White;
}
```

→ The Result you will see that the Red color is applied to whole text which are present in HTML.

→ while, White color makes whole background of your screen white.

⇒ diff btw Body Element Selector vs universal

Body

→ If you use Body tag to apply CSS. it will apply to whole content

→ But if we Shrink the container, we have made with the help of dotted line

→ It will show how first it make line for html, then Body, then other element.

universal -

→ If you uses this it will apply CSS to all

→ But it will make one dotted line for Body & HTML tags only

→ It will not generate dotted line for other tags like heading & Paragraph.

5) Group Element * Selector * (,)

like (p, b)

→ It uses to selod all the element which you have mention in css file, it will apply same style to every elements.

→ It is similar to elements only but we are giving more than one elements, that why we called it as a group selector.

→ group selector is seperated by (,) symbol.

→ example

Syntax

```
<h1> Hello folks </h1>
<h 2> Hello coders </h2>
<p> This 3 tags uses group selector </p>
```

In css file.

```
h1, h2, p{ text-align: center;
           color: red;
           background-color: beige;
}
```

→ with this the Result you will see that it apply css to all elements

6) Descendent Selector * (li a {u})

→ This is used to speify that I have to you li element list from in that it will apply style (a) only.

→ which are present in list not outside the li <a> tags

→ Example:

Syntax

<a> link-1
" " " -2 " "
 plain text -1
 " " " -2
<a> out of list Anchor tag - link-3

In CSS

li a{
color: white;
background: black;
}

In Result you can see that only Link-1, Link-2 got CSS applied while link-3 anchor tag did not get applied this is how descendent selectors work.

→

7) Direct Child * (>)

-> We use (>) symbol to use direct child selector.

-> It will apply only direct parent > child not

-> grand parent > parent > child.
<P>

-> It will apply like b>i or p>b

-> example.

Syntax

 This font is Bold in nature
 while this font in italic in nature

In CSS file.

b>i {
color : white;
background-color: Black;
}

The Result you will get it because of direct child.

But if you use P i {
}
It will not work.

* Styling in CSS *

→ In this font property is used to control the look of the texts.

→ By the use of css font property you can change the text size, color, style and many more.

i) CSS Font Color.
ii) CSS Font Family.
iii) CSS font size.
iv) CSS Font Style.
v) CSS Font variant.
vi) CSS Font weight.

i) **CSS Font color** :- It is used to change the color of the texts, you can color by three types a) color name b) Hexadecimal value c) RGB.

Syntax

```
<html>
  <head>
  </head>
  <body>
    <h1> This is Heading 1 </h1>
    <h2> This is Heading 2 </h2>
    <p> This is a paragraph. </p>
  </body>
</html>
```

In CSS:

```
h1 { color : red;          }
h2 { color : #0000A1;      }
p  { color : rgb(0,220,96); }
```

* CSS Text *

i) Set the Color It will color your text.

 This text is in Red

ii) Set the Direction It will start from left to right

 This text is from right to left

 This text is from left to right

iii) Set the space between characters

 This text is having space between letters

iv) Set the space between words

 This text is having space between words.

v) Set the text indent.

 This text will have first by 1 cm and this line will remain at its actual position this done by CSS text-indent property.

vi) Set the Text Alignment It will text your from left, right center and justify.

 Text Right
 Text Center
 Text left

vii) Decorating the Text

 This is inunderline
<p " = " " : linethrough;"> this Striked through
<p " " " " : overline;"> This will above line

viii) Set the text Cases

 This text is Capatize

☆viii) Set the space between text.

 Lorem 50

ix) Set the Text Shadow

<p style="text-shadow: 4px 4px 8px blue;>
Blue Text in Zain

* CSS Background *

i) Background - Color
ii) Background - Image
iii) Background - repeat
iv) Background - attachment
v) Background - position.

i) Background - Color *

It is used to specify the background color of the element.

```
<body>
  <h2> My First CSS Page </h2>
  <P> This is an example of CSS Background </P>
</body>
```

In css

```
h2,P{
    background-color: red;
}
```

ii) Background - Image *

It is used to Add text upon image :

```
<P style="background-image : url (/image/Path);
    Color : red; height : 630px; width : 800px;
    font-size : 20px;" > This Text Element
    Set background image. </P>
```

3) CSS Background-repeat * It is used To Add Image in Background and repeat it multiple time, from Horizontal & Vertical.

```
body{
    background-image: url("img.path");
    ''          -repeat: repeat-x;
}
<h1> Hello.folks--- </h1>
```

4) CSS Background-Attachment *

It is used to Add photo in background. And that image is fixed, while text will scroll not image.

```
<P> This is a fixed image </P>
<P>  ''     ''      ''   </P>
```

In CSS:

```
body{
    background: white url("image path")
    background-repeat: no-repeat;
    background-attachment: fixed;
    margin-left: 200px;
}.
```

* Links in CSS *

Links are used to link two pages. And we can Add properties in CSS.

→ There are 4 Types

i) a:link → Normal link
ii) a:visited → visited link
iii) a:hover → when the user moves the mouse over the link
iv) a:active → link is clickable.

Note: i) a:hover always comes after a:link & a:visited.
ii) a:active always comes after a:hover.

Syntax

```
<body>
    <p><b><a href="Path" target="_blank">
    Click Here</a></b></p>
</body>
```

In.css

i) a:link { unvisited link.
    color: red;
    }

ii) visited link.
a:visited {
    color: green;
    }

iii) mouse over link
a:hover {
    color: hotpink;
    }

iv) selected link.
a:active {
    color: blue;
    }

* Text Decoration *

```
a: link {
        text-decoration: underline;
                         none ;
    }
```

* Background color *

```
a: link {
        background-color: yellow;
    }
```

---

* Lists In CSS *

-> CSS list-style-type property is used for displaying items of ordered & unordered list.

-> unordered list.

```
< ul style = " list-style-type : disk >
"       "       "       "   : circle >
"       "       "       "   : square >
"       "       "       "   : none >
```

Ordered list

<ol style="list-style-type: decimal;>
" " " " : upper-alpha;>
" " " " : lower-alpha;>
" " " " : upper-roman;>
" " " " : lower-roman;>

* Image in list *

we can put images rather than items numbers or in alphabetic characters.

→ < ul style="list-style-imge : url(imagepath);">

* Position in list *

< ul style="list-style-position: inside;>
< " " " : outside;>

* Shorthand property *

ul { list style: square inside url ("image path");
}

* Styling List with colors *

```
<ul>
  <li> coffee </li>
  <li> Tea </li>
  <li> Coca cola </li>
  <li> Fanta </li>
</ul>
```

```
<ol>
  <li> coffee </li>
  <li> Tea </li>
  <li> Coca cola </li>
  <li> Fanta </li>
</ol>
```

In CSS

```
ol {
  Background : # FF9999;
  Padding : 20px;
}

ul {
  Background : # 3399FF;
  padding : 20px;
}

ol li {
  Background : # FFE5E5;
  padding : 5px;
  margin-left : 35px;
}

ul li {
  Background : # CCE5FF;
  margin : 5px;
}
```

* CSS Display *

It is property use for how to display list of item.

* Block-level Elements * -> It will take entire width of your screen.

It always starts on a new line and takes up the full width availbe. -> Block means it start from elements not in a line.

```
<p> Display links as block element</p>
<a href="/ image path" target_blank > HTML </a>
"  "  "  "  " > CSS </a>
"  "  "  "  " > Javascript </a>
```

In CSS

```
a {
    display: block;
}
```

* Inline Elements * It will not take extra height & width because it works in Inline.

It start from not a new line in an same line -> Inline means Attribute.

```
<ul>
    <li href=" image path "> HTML </li>
</ul>
```

In CSS

```
li {
    display: inline
}
```

* Inline-Block Style *

It is used to Apply CSS as like to Act like Block style in form of inline block.

```
li {
  display: inline-block;
}
```

In HTML

```
<p> First Block Paragraph </p>
<ul>
  <li> This Block paragraph </li>
```

* none - style *

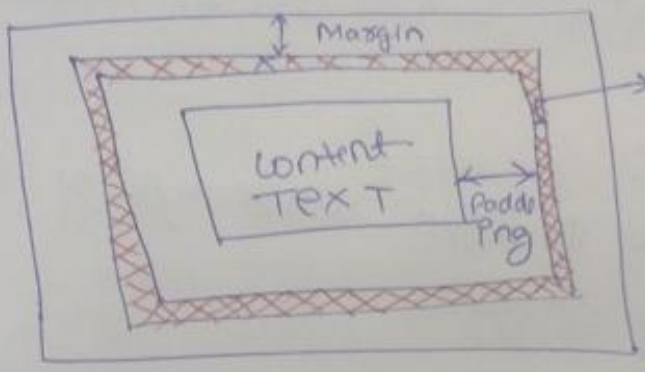
In this your content will not display the content which will apply in none style

```
li {
  display : none;
}
```

In HTML

```
<p> First Block paragraph </p>
<ul>
  <li> This Block paragraph </li>
```

* CSS Layout Style *



i) Margin

This is used to space giving between Border & Screen is called margin.

ii) Border

It is used give thick, dotted type boorder to seperate content and margin.

iii) Padding

It is used to gave space between content & border.

-> It is used to make cell or row thick.

* CSS Border *

It is used to border on an element.

1) CSS Border-Style

It is used to style what type of border you want to style.

 This Element border style solid.

2) CSS Border-width

It is used to set thickness or thiness of the border.

-> You can give by in percentage, pixel and by medium, thick and thin

-> write your text here
 " "
 " "

In CSS

```
p.one{
    border-style: solid;
    border-width: 5px;
    }

p.two{
    border-style: solid;
    border-width: medium;
    }

p.three{
    border-style: solid;
    border-width: 1px;
```

Individual sides - Border

The borders are applied in (TOP, right, bottom, & left).

```
p{
  border-top-style: dotted;
  border-right-style: solid;
  border-bottom style: dotted;
  border-left style: solid;
}
```

<p> different border styles.

* Rounder Borders

```
p{
  border: 2px solid red;
  bordiradius; 5px;
}
```

* CSS- Border- color *

```
p{
  border-style: solid;
  border-color: red;
}
```

* CSS Margin *

→ In this you can gave space between screen corner to border.

```
p {
    border : 2px solid orange;
    margin-left : 20%, 20px, auto;
}
```

It can be done in left, right, Top & bottom

* CSS Padding *

→ In this you can gave space between content & border.

```
p {
    border : 5px solid red ;
    padding-left - 30p;
}
```

Tailwind

* Navigation Bars *

It is used to Navigate Any website

Home | Tabling | About | Contact

-> Navigation Bar: Lists of links.

-> we can use block as well Inline Attribute

```
<ul>
    <li>Home</li>
</ul>
```

In css

```
ul {
    list-style-type: none;
    margin: 5px;
    padding: 5px;
}

li {
    display: block;
    color: black;
    padding: 8px 16px;
    text-decoration: none;
}
```

It will produce the result in vertical.

Home
About
Contact

→ Horizantal Navbar

It is used by inline display

```
<ul>
    <li> <a>Home </a> </li>
```

In CSS-

```
li {
    display: inline
}
```

→ Position

-> Static -> It is same as default
-> relative ->
-> absolute ->
-> fixed -> It will fixed and if you scroll down it will not move
-> Sticky ->

* Introduction to CSS3 *

→ It is the latest version of CSS.
→ In this you can style in a dynamic Nature, in 3D, 2D way.
→ It has more flexible than HTML ~~are~~.

* Box shadow *

It is used to Add shadow effect around element frame.
we did not Add any image for this.

* Rounded Corners

→ It is used to Round your box corner without writing n° number of code.
→ By just border-radius property you can use this.

```
#corners{
    border-radius : 25px;
    border: 2px solid white;
    padding: 20px;
    width: 200px;
    height: 150px;
}
```

* CSS Multiple Background *

It is a background-clip property.

```
.clip1{
        background-clip: border-box;
                         padding-box;
                         content-box;

}
```

* Animation *

→ In this you can delay or retrive your image or Any content.

→ It is used for @keyframes {
                }

```
@keyframes example{
        from {background-color: red;}
        to {background-color: yellow;}
}

div {
    width: 100px;
    height: 100px;
    background-color: red;
    animation-name: example;
    animation-duration: 4s;
}
```

Tail Wind

* Pseudo classes *

-> It is mainly used to apply style to a particular state of element.

-> Hover (universal) -> For some Animation
-> Active -> link in Active.
-> Focus -> means you have already visited this link.

* Flexbox *

-> It is used to create layout.
-> It is 1D layout means it only in row or in column.

* Media Queries *

-> It is used to making for the building responsive website.
-> Based on the device screen we can know custom style is rigged accordingly:

-> It is used by @media.

-> There are two important thing to understand in this is max-width; min-width.

Suppose

max:

max-width: 400px (screen size is <= 400px)

min-width: 400px (screen size is >= 400px).

Overflow

- It is used to make your content in a box.
- It has more property like, hidden, auto scroll.

-

```
.Hero {
    height: 200px;
    width: 100px;
    background-color: yellow;
    overflow: scroll;
}
```