

## Sigma CSS

:- css ka use ham html page ko style karne ke liy karte hai. html me ham jo website ka structure banate hai vo kaisa dikhega ye sab kuchh css se kiya jata hai.

CSS ko ham 3 tarike se html me add karte hai. 1. Inline css - es css ka use ham tag me hi style tag lagakar karte hai or eski priority sabse jada hoti hai.Lekin eska use ham nhi karte hai kyu ki hamare pas agar 100 tags hai to ham har tag me jakar style karni padegi.

```
<h1 style="color: orange;">hai today my mood css</h1>
```

2. External css – es css ko ham head tag ke andar style tag lagakar karte hai.eska use ham bahut jada nhi karte hai. kyu ki esase hamara html page kafi durty ho jata hai.

3. External css - es css ki ham dusri file banate hai or link tag se use html page se jodte hai.Sabse jada ham esi tarike se css use karte hai.

Selector – html me jitney tag hote hai un sabhi ko ham selector banakar estemal kar sakte hai. har tag ko ham select karke uspe style laga sakte hai.or ham ak sem style kisi or tag par karna chahate hai to use (,) se sapret karke us tag ko bhi select kar sakte hai.

```
Jaise -      h1,span {  
    color: orange;  
    background-color: blue;  
}  
</style>
```

### Selectors = #ID & .Class

#ID – unique hoti hai id jis name se ban gae us name se dusri id nhi ban sakti hai. id se ham kisi bhi element co css me target kar sakte hai.

.Class – class ham ak hi name ki jitni chahe utni bana sakte hai jada tar ham class ka hi use karte hai, esase bhi ham html ke kisi bhi element ko css me target kar sakte hai.

```
<p id="demo">hai i am first pairagraph</p>  
<p class="p2">hai i am second pairagraph</p>  
<p class="p2">hai i am therd pairagraph</p>
```

ID – Class – id ko ham # se target kartehai or class ko ham(.) se target karte hai.

```
#demo {  
    color: blue;  
    background-color: gray;  
}  
.p2 {  
    color: white;  
    background-color: blue;  
}
```

: - hame agar ak hi style kae tags par lagni ho to ham (space) lagakar us tag ka name likh dete hai or sem style uspar bhi aplay ho jaygi. Dusra tarika hai ki ham (>) ka use karte hai . > ka use ham tab karte hai jab koe element direct parent tag ke andar ho. Or (space) ka use ham tab karte hai jab parent element fir ak or element fir ak or element chahe vo element kisi bhi kone me ho (space) ka use karne ke bad style uspar aplly hokar hi rhegi.

\*Universal selector – eska use karke ham jo bhi sityle karenge vo sare html page ke elements par aplly hogi.

```
*{  
    width: 100%;  
}
```

Pseudo Selector – (:) es selector ka use ham hover ,visited,link,etc... en sabka color style cheng karne ke liy karte hai.

```
a:link {  
    color: red;  
}  
a:visited {  
    color: green;  
}
```

Link – esase link style kar sakte hai.

Hover – esase ham hover style kar sakte hai jab ham mouse uspar lekar jate hai. ushi ko hover kahate hai.

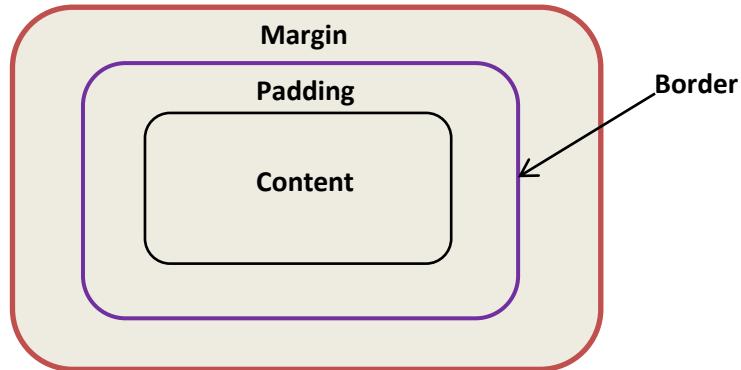
Visited – eska matlab jab ham kisi likn par visit kar chuke hote hai usko tyle kar sakte hai.

Active – jab ham kisi link par click karte hai use active kahate hai esase ham active ko style kar sakte hai.eska use ham bahut kam karte hai.

First-child – esame jis element ko rakhenge vo jis jis element ka first-child hoga uspar style hogi bas.eska bhi use ham bahut kam karte hai.

## CSS BOX MODEL

: - Ham jitna bhi content banate hai sab ak box hota hai , ya use ham container bhi bol sakte hai. alag – alag element ke liy alag – alag boxes banate hai.



: - hamare box me hota hai content or box ke bahar hoti hai margin or box or content ke beech ki doori ko ham padding kahate hai.

: ham margin padding border to de dete hai lekin hame agar total width ya height nikalni ho to ham

Total width formula ka use karte hai – width+left&right padding + left&right Border + left&right margin.

Total Height – height + LR padding + LR Border + LR Margin.

Box-sizing: border-box – es PROPERTY ka use ham jada tar karte hai ese lagate hi hamari (height&border&padding) tino ak me jud jati hai. agar ye PROPERTY nhi lagaya to sirf box ke content ki height hi utni hogi jitni hamne set ki hai. or es PROPERTY ka use karne par (height,border,padding) tino milakar utni height ho jaygi jitni hamne di hai.

Jaise – 200px height de di to PROPERTY ka use karne ke bad 200px me hi (content,border,padding) tino aaynge or PROPERTY ka use nhi karne par sir (content) ki height 200px hogi (border,padding) ko alaga se jodenge.

### MARGIN COLAPS

: - agar hamne do box bany or dono ko cahro taraf se 20px margin de di to uske hesab se box1 ki 20px margin or box2 ki 20px margin dono milakar 40px magin honi chahiya lekin page par hame dono box ke beech me sirf 20px ki hi magin milti hai or ese hi ham margin colaps kahate hai.

margin colaps ye kahata hai ki agar do boxes ki margin ak dusre ke upar overlap ho rhi hai to sirf utni hi margin milegi jitni margin set ki gae hai 20px. agra ham box2 ko 30px margin denge to box2 ki margin apply ho jaygi jiski margin jada usi ki margin apply hogi.

## CSS Fonts

Font-family – es PROPERTY se ham elements ka font change karte hai.

Font-style – es PROPERTY se ham font style lagate hai. italic.

Font-weight – es PROPERTY se ham font ko bold kar sakte hai. 100 to 900 pints.

Text-decoration – es PROPERTY se ham text ko underline karte hai, or overline bhi kar sakte hai jisase line upar aati hai.

Font-size – es PROPERTY se ham font size set karte hai 16px normal font size hoti hai usase jada ham kitna bhi kar sakte hai. or value bhi pass kar sakte hai

Jaise – large, larger, x large, xx large, medium, small, smaller, x small, xx small.

```
h5 {  
    font-family: Arial, Helvetica, sans-serif;  
    font-style: italic;  
    font-weight: 300px;  
    text-decoration: underline;  
    text-decoration: overline;  
    font-size: 20px;  
}
```

Line – height – esase ham line ke beech ki doori ko badhate hai .ham points me bhi line height ki value ko de sakte hai. Esaki difoult line-height 110% & 120%.

Letter-spacing – Esase letter ke beech me doori aati hai ese ham px me dete hai.

Fonts Name – serif , sans-serif , monospace , cursive , EB Gramond .

Google – font – Baloo Bhai , Baloo Bahana , Poppins Etc.. ye fonts ham do tarike se add kar sakte hai 1 @import url="fontUrl" , 2 <link rel="?" href="fontUrl">

## CSS TEXT PROPERTIES

Text-transform – es PROPERTY se ham text ko uppercase , lowercase , capitalize. Uppercase – se pura word upper ho jayga , Lowercase – se pura word lowercase ho jayga Capitalize – se word ka first letter capital ho jayga.

Text-decoration-color – es PROPERTY se ham jo underline hai uska color badal sakte hai.

Text-decoration-style – es PROPERTY se underline ko ham style dete hai. Jaise – dashed,dotted,double,wavy Etc....

Text-decoration-thickness – es PROPERTY se underline ki motaai ko badate 5ak am karte hai or ese ham px me dete hai.

Text-indent- es PROPERTY se ham jab indent set karte hai to hamara text apne indent se aage badhta hai. eski value bhi ham px me hi dete hai.

Overflow : hidden – eska use ham box se bahar nikale huy text ko chhupane ke liy karte hai.

Text-overflow – eska use ham tab karte hai jab hamara text hamare box se bahar nikalne lagta hai ya overflow hone lagta hai. - ellipsis , clip , Ellipsis se overflow text ki jagah par (...) aayga or Clip se ye pure text ko clip kar dega.

Overflow – break = “break-all” – eska use karne se ye words ko break kar dega matlab agar AMAR likhne ke liy jagah nhi hai or sirf AM hi likh sakte hai to ye word ko bread karke AM likh degaor AR dusri line me likhega.

Text-align – center,right,left, Esake use se ham text ko kisi bhi side sift kar sakte hai.

```
h2 {  
    text-transform: capitalize;  
    text-decoration: underline;  
    text-decoration-color: green;  
    text-decoration-style: wavy;  
    text-decoration-thickness: 9px;  
    text-indent: 20px;  
    overflow: hidden;  
    text-overflow: clip;  
    word-break: break-all;  
    text-align: center;  
}
```

## CSS COLORS

:- css me millions of colors hote hai lekin css me sare color nhi mlte hai to ham colors ko 3 tarike se set kar sakte hai. 1 – colorKeywords 2 – RGB(“red 255,green255,blue255”) 3- hex decimal value color

HexColor – eska us ham tab karte hai jab hame jo man chahe vo color dena ho to eski suruaat # se hoti hai. to ham google par jate hai or (hex color code ) search karte hai or jo color chahiya us color ka hex color code junrate kar lete hai.

RGB color – esame hame 3 color milte hai red green blue or enhi ki value ko kam besi karke ham apna color banate hai. ham 255 se jada value nhi de sakte hai kisi bhi color ko.

RGBA color – ye bilkul rgb jaisa hi hota hai lekin esme ak option add ho jata hai (alpha) – eski default value 1 hoti hai or eska use ham color opacity ko kam ya jada karne ke liy karte hai. 1 se jitna kam karenge otni opacity kam hogi.

Color-keywords – esme ham color ka name likhte hai or color empliment ho jata hai.

Hsl (hue saturation lightness) – eska use ham jada nhi karte hai lekin ham esase bhi color laga sakte hai. hsla bhi hota hai jisme ham alpha value bhi de sakte hai.

```
.box1 {  
    /* type of color empliment. */  
    color: rgba(47, 255, 0, 0.301); /*rgba color*/  
    color: rgb(23, 45, 34); /*rgb color*/  
    color: #fffbcff; /*hex color code*/  
    color: red; /*color keywords*/  
    color: hsl(235, 100%, 50%); /*hsl color*/  
}
```

Background-color – Esase ham background color dete hai or upar ke 5 tarike se ham background color bhi de sakte hai.

Border-color – Border ka color bhi ham upar ke 5 tarike se de sakte hai

```
border: 2px solid rgba(34, 34, 34, 1);
```

text-decoration-color – ye color bhi ham upar ke 5 tarike se de sakte hai

```
text-decoration-color: rgb(34, 78, 87);
```

:- Jaha bhi ham color ka use ckarenge vaha ham 5cho tarike se color laga sakte hai.

## CSS EXASIZE 1

Q1. Write html and css code to style a paragraph inside a div which contains 5 other paragraphs. The first paragraph must have background color yellow and text color red. The other paragraphs must have background color blue and text color white. The HTML is written below for your reference. do not cheng html.

## CSS SPECIFICITY & The CASCADE Algorithm

: - jab ham do class se ak hi element ko alag – alag style de dete hai to kon si style aply hogi eske 4 rules hai.

1 – Jo last me style di gae hai vahi aply hogi.(over right hogi)

2 – Specificity(eska matlab hai ki kiski value jada hai) sabse jada value hoti inline css ki inline css lagane ke bad koe css kam nhi karti hai.

3 - Eske bad id ki value jada hoti hai.

4 - Eske bad calss ki value hoti hai.

5 - Eske bad aata hai element selector [data-x = a]{bg-color : red;}

6 – Eske bad aata hai universal selector (\*)

: - en sabka use tab karte hai jab kisi element par style dene ke bad uspar dusri style dena hota hai tab to jiski value jada hai uska use karte ham style ko override kar dete hai. Lekin agar ham inline ka use kar denge to use doond ke hi style cheng karna padega.

3 – Origin – Eska matlab hai ki jab ham apne element par style aply nhi kiy hote hai tab user agent stylesheet ke style aply hote hai. fir bad me jab ham apni style lagate hai tab hamari style user agent stylesheet par overright ho jati hai.

4 – !Important – agar style ke andar hamne !Important ka use kar liya to inline css bhi overright ho jaygi.

```
.box3 {  
    color: orange !important;  
}
```

### Specificity (Priority , Value ) Calculation :-

(\*) Universal Selector point – 0

Element Selector points – 1

Class/Attribute/Pseudo-Class points – 10

ID Selector points – 100

Inline Style points – 1000

En 5cho selectors me se agar kisi ak selector se ak hi element par 5 bar style di gae to sabse last vale ki style apply hogi.

**Specificity add :** - agar ham kisi element ko target karke or uske bad usi element ki class ko bhi target karke style dete hai. To element + class Selector add ho jaynge or en dono ko add karte hai enki point value bhi add ho jaygi or eski Specificity jada ho jaygi. Fir ye style apply ho jaygi.

Jitni jada specificity utni jada value or ese overright karna utna hi mulkil.

: - Hame Jada se jada ye karna hai ki kabhi bhi ak hi element ko kaise bar style na dena pade (ak achha coder yahi karta hai) apne coding ko simple or sundar karna hai ak me hi milakar khichadi nhi banana hai.

```
div.box3 {  
    color: orange ; /*Specificity 11*/  
}
```

### CSS SIZING UNITS

: - Ham text, border, images, box, elements etc.. me size dete hai or size unit kaise parakar ki hoti hai. px, vh, vw, rem, em, vmin, vmax etc... ye sabhi sizing units hai.

Px – Eska size unit 1/96 inch hoti hai. agar ham ese apne monitor ke hisab se decide dete hai to dusra koi apne monitor me jab website kholega to uske me hamari website fit jaygi.

Vw (view width) – Eska use ham responsive jaise kare hai agar hamne size 100vw set kar di to ye alag – alag monitor ke screen me apne aap fit ho jayga. Horizontal scroll bar aayga hi nhi. Agar ham 100vw se jitna kam value denge ese

ye monitor ki screen utni percent(%) hi lega chahe ham ese kitna hi upar niche kare.

**Margin-auto** – es css pro parte ka use ham kisi bhi block element ko center me karne ke liy karte hai. Matlab margin-auto karne par block element ko left – right dono se same margin milne lagti hai.

Vh (view height) – Ye bhi akdam vw jaise hi kam karta hai bas (vw) width ki size set kar rha tha vaise hi (vh) height ko set karta hai.

Em – Ye unit us value ko badati hai jo element ko milne vali thi jaise by default page ka font size 16px hota hai to agar hamne font-size 2em de di to font size double ho jaygi. Kyuki page ko 16px milne vala tha to 2em unit dene par size 2 guni ho gae 3em denge to tin guni ho jaygi.....

Rem(matlab : usko jitna milne vala hai uska mujhe double do.) – ye unit bhi size ko double karti hai jab ham 2rem value dete hai to jitna mean element ko size milne vala tha usase double size milega jisko hamne 2rem value di hai.

Vmin – ye units phon or monitor dono par alag – alag kam karti hai. Kyuki phon ki width kam hoti hai or monitor ki height kam hoti hai to jab bhi ham vmin unit ka estemal karte hai to agar phon ke liy kar rhe hai to vmin ka matlab hoga (minimum width) or jab ham monitor me vmin ka use karenge to eska matlab hoga(minimum height) .

**Min-height** – es PROPERTY ka use ham min height ya min width dene ke liy karte hai. hamne jitna ese min height diya hai ye kam se kam to utna hi rhega or max ki koe limit nhi hai jabtak ham max value nhi dete hai.

Presenteg(%) – eska use ham jada nhi karte hai Jab bhi ham present me koe height ya width dete hai to vo element apne parent ka utna present width height leta hai. esliy hame ve,vh etc ka use karna chahiyo.

## CSS DISPLAY PROPERTY

: - Display PROPERTY se ham bahut sari chije set kar sakte hai jaise block element ko ham inline element bana sakte hai or inline element ko block element bana sakte hai.etc....

Display-inline/block – es PROPERTY se ham elements ko inline ya block element bana sakte hai. Agar hamne kisi block element ko inline banaya hai to uspar jab ham padding or margin denge to top me kam nhi karegi or width bhi kam nhi karegi or height bhi kam nhi karegi. Agar top me bhi margin or padding lagana hai to hame (display – inline-block) PROPERTY ka use karna padega.

Display-none/block – display none PROPERTY ham jise bhi dete hai vo gayab ho jata hai or fir usko vapas lane ke liy display block PROPERTY ka use karte hai.

Visibility – hidden – Es PROPERTY ka use ham tab karte hai jab hame koe element gayab karna ho lekin usne jo jagah gher rakhkha hai vo gayab na ho .

```
.box {  
    border: 2px solid blue;  
    display: inline-block;  
    width: 200px;  
    height: 200px;  
    margin: 2px;  
    padding: 8px;  
    visibility: hidden;  
    display: none;  
    display: block;  
}
```

## CSS SHADOWS AND OUTLINES

Box-shadow – Esase ham box par shadow lagate hai. shadow lagane ke 6 tarike hote hai ham (-) me bhi box shadow lagate hai.

(box-shadow : h-offset v-offset blur spread color inset;)

h-offset and v-offset :- Esase ham horijontal and verticle distance set karte hai ki shadow kitni door hogi.

Blur – Jitna jada blur value denge utna jada blur hogा.

Spread – Jitna jada value denge utna shadow size badega.

Color – Shadow ka color set kar sakte hai.

Inset – inset ham tab lagate hai jab hame andar ki or shadow chahiye hoti hai  
nhi to inset nhi lagate hai.

```
.box1 {  
    box-shadow: 2px 2px 9px 3px green inset;  
}
```

Text-shadow – Jaise hamne box par shadow di hai vaise hi ham text par bhi  
shadow de sakte hai text-shadow PROPERTY ka use karke.

```
.text {  
    text-shadow: 0.70px 0.70px 4px blue ;  
}
```

Outline : width style color : - Outline ka use ham border jaise hi karte hai sem  
to sem lekin border andar hota hai or outline bahar hoti hai or border apni  
jagah gherta hai or outline jagah nhi gherti hai. Outline ki outline-offset :  
PROPERTY ka use karke doori set kar sakte hai lekin border ki doori nhi set kar  
sakte hai.

```
.box2 {  
    outline: 2px solid blue;  
}
```

Outline-offset – Esase ham outline ki doori badate hai .outline ki width ham nhi  
set kar sakte hai. or outline ko ham direct curve nhi kar sakte hai.

```
.box2 {  
    border: 2px solid black;  
    outline: 2px solid blue;  
    outline-offset: 7px;  
}
```

Border-radius - Esase ham border ko curve karte hai matlab round karte hai. Or  
border ko ham charo kono se round kar sakte hai.

```
border-radius: 12px 23px 45px 20px;
```

## STYLING LISTS USING CSS

: - list styling jaruri esliy hoti hai kyuki ham jada tar list ka use navigation bar me karte hai.

### LISTS PROPERTYS : -

List-style – none; - esase list ka jo (.) ya marker hota hai vo gayab ho jata hai.or style me ham bahut sari style bhi de sakte hai . squer,circle,devanagari ,etc... Jab bhi ham list par styling karenge to vo style marker par apply nhi hogi kyuki marker list se bahar hota hai.

List-style-position – inside/outside – Es PROPERTY se ham marker ko list ke ander ya bahar late hai. jisase marker par bhi style lagegi.

List-style-image: url="poshpa2.jpg"; - es PROPERTY se ham marker ko image se replace kar sakte hai.

List-style-type: "Select Emogi"; - es PROPERTY se ham marker ko emogi se replace kar sakte hai.

List-style – esme ham ak sath kae style kar sakte hai jaise ham disc kar sakte hai fir inside ya outside bhi kar sakte hai or sath sath image bhi laga sakte hai. lekin ham disc or image dono me se ak hi use kar sakte hai.

```
list-style: disc inside url("poshpa2.jpg");
```

```
nav ul li {  
    list-style: devanagari;  
    list-style: disc inside url("poshpa2.jpg");  
    background-color: green;  
    list-style-position: inside;  
    border: 2px solid black;  
    list-style-image: url("poshpa2.jpg");  
}
```

Eska matlab : - hai ki NAV me jo UL hai fir uske andar jo LI hai uspar ye sari style laga do.

## OVER FLOW PROPERTYS

Overflow : scroll – Es PROPERTY ka use karne se jo text overflow huaa hai usme scroll bar aajayga.

Overflow : auto – Es PROPERTY ka use karne se jab text jada hogा tabhi scroll bar aayga nahi to nahi aayga. Jada se jada ham eski use karte hai.

White-space : nowrap – Es PROPERTY se text wrap nahi gata or sirf horizontal scroll bar aayga.

Text-overflow : ellipsis – Es PROPERTY se text jada hota hai to uske samne (...) aajata hai.

Overflow – x : hidden – Esaki ham horizontal scroll bar ko chalu rakhte hai or verticle ko off rakhte hai.

Overflow – y : scroll – Esaki ham verticle scroll bar ko chalu rakhte hai .

Overflow : x-y – PROPERTY ko ham ak sath bhi likh sakte hai

(overflow : scroll hidden;) pahala vala x hota hai or dusra vala y hota hai.

```
overflow: scroll;  
overflow: auto;  
white-space: nowrap;  
text-overflow: ellipsis;  
overflow-x:hidden;  
overflow-y: scroll;  
overflow: hidden scroll;
```

## CSS POSITION PROPERTY

: - By default css position property static hoti hai matlab ki jaha hai vahi rhega. Esme ham top,bottom,left,right koe property use nahi kar sakte hai agar koe bhi property set karni hai to hame pahale position – relative property lagana padega.

Position – relative – Es property ko lagate hi ab ham apne element ko top,bottom,left,right se position set kar sakte hai. Jaise top se agar 30px detehai to element top se 30px niche aajayga.

```
.box1{  
    background-color: green;  
    position: relative;  
    top: 30px ;  
    left: 30px;  
}
```

Z-index: 1; - z-index : 1 ; Se ham apne element ko sabse upar late hai jiski z-index value jada rhegi vo sabse upar rhega. Or Es properte ka use karne ke liy bhi hame pahale position relative lagana padega or z-index se ham apne element ko sentback,sentup,karte hai matlab ki kon aage hona chahiya or kon pichhe hona chahiya.

Position – absolute; - Es property ka use jada tar parengt element me hota hai . sabse bada parent hota hai html tag uske bad body uske bad hamne jobhi tag use kiy hai vo aaynge to agar hamne kisi element ki (postion-absolute) kar diya to ye element sabse pahale dhundega ki mujhe kiske relative hona hai .

Sabse pahale ye apne parant element se puchhega ki papa kya aap absolute ho to agar papa ki (position – absolute) hai to ye element apne papa se relative ho jayga or fir ham jitna top,bottom,left,right value denge ye apne papa ke hisab se position set karega.

Or agar papa ki (position-absolute;) nhi hai to ye element papa se puchhne ke bad jayga apne dada ji ke pas (body) unse puchhega ki kay aapki

(position - absolute) hai to dada ji bolenge nhi to ab ye unke papa matlab (html) ke pas jayga unse puchhega ki kya aap (absolute) hai to vo bolenge ki mai bhi nhi hu lekin mere se upar ab koe nhi hai to tum mere hi (relative) ho jao. To ab ye element direct html se relative ho jayga or top,bottom,left,right, value dene par html page ke hisab se pani position set karega.

```
.box3{  
    background-color: gray;  
    position: absolute;  
    top: 1px;  
}
```

Position – fixed ; - Es property se element apni jagah par fixed ho jata hai.

Position – sticky; - Es property se element apni jagah par chipak jata hai. or eska use ham jata tar navbar me karte hai. Esme or fixed me ye antar ki fixed karne par element apni jagar par hi fixed ho jata hai lekin sticky ko ham jab tak uske jitna scroll na kar le tab tak vo chipke gi nhi vo ak static element jaise bartav karegi.

Position – absolute – Agar hamne parent se child ko absolute top : Opx; kar diya to child parant se Opx par set ho jayga or fir agar hamne parent ki position ko sticky ya fixed se kar diya to parent ke sath hi child bhi Opx par chipka rhega kyuki vo pane parent se Opx position par set hota rhega. Or agar parent se position absolute hata kar child me hamne position relative laga di to vo apne parent ke hi relative ho jayga apni jagah par.

(Transform:translate(0);

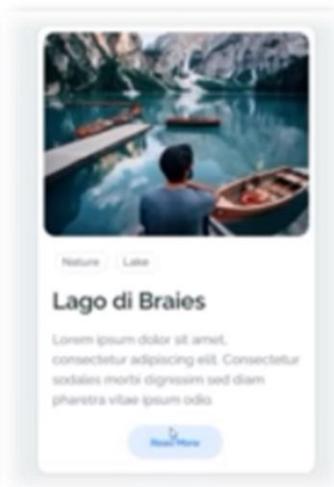
Filter:invert(0);

Perspective: 0em;) – Agar ham parent par position – absolute nhi lagakar entino propertys ka use karenge to hamara child hamare parent ke relative hi position hogta. HTML page se apni position set nhi karega.

```
.parent {  
    border: 2px solid maroon;  
    background-color: lightpink;  
    margin: 10px;  
    /* position: absolute; */  
    /* position: sticky; */  
    /* transform: translate(0); */  
    /* filter: invert(0); */  
    perspective: 0em;  
}
```

### Exercise 3

Make this card.



## CSS VARIABLES

:- Variables ka use ham es liy karte hai ki agar ak hi wesite me ak hi color 50 jagah par use ho rhe hai to ham har jagah par vahi color nhi denge balki ham variable ka use karenge or us color ko agar cheng karna pada to ham variable ke color ko cheng karenge to sab jagah ke color change ho jaynge Or agar variable ka use nhi kiya rhe ga to firse 50 jagah ka color manualy change karna padega. (HAM JAHA BHI COLORS USE KARTE HAI SAB JAGAH PAR HAM VARIABLE KA USE KAR SASKTE HAI – color, bgcolor, border etc....)

Ham ksi bhi programing lang me globle variable asign karte hai ( $x = 4$ ) . aise karte hai . Lekin CSS me ham aise nhi kar sakte hai CSS me variable lagane ke liy (:root{}) ka use karte hai. or variable ke aage (--) do bar lagate hai.

```
:root{
    --color : blue;
    --seccolor : white;
}
```

Variable ki value ko use karne ke liy ham var() function ka use karte hai. ham var fun me variable ka name dalte hai or variable ki value hamare element par aply ho jati hai. Ab agar variable ki value cheng hoti hai to jaha – jaha variable ki value use ho rhi hai sab jagah ki value cheng ho jaygi.

```
.contener {
    background-color: var(--color);
    color: var(--seccolor);
}
```

Local variable – Ham jo :root me variable banate hai vo globle variable hota hai or agar kisi element ko alag se koe style dena hai to ham chahe to ak local variable bna sakte hai. Or uske liy hame :root ki jarutar bhi nhi padegi. Kyu ki globle variable ki value overright ho jaygi.

```
ul li:first-child{
    --Wcolor: blue;
    background-color: var(--Wcolor);
}
```

Variable Not Found – Agar Kabhi hame variable nhi milta hai ya koe problem hoti hai to ham (,) lagakar value dete hai. Taki variable ki value na mile to (,) ke bad vali value apply ho jay.

```
ul li:first-child{
    --Wcolor: blue;
    background-color: var(--Wcolor,green);
}
```

Yha agar (Wcolor) variable available nhi hota hai to green color apply ho jayga.

:- Ham chahe to variable me dher sari style save karke rakh sakte hai or ak bar me kisi bhi element par uska use kar sakte hai.

```
:root{
    --mrg : 10px;
    --brcolor : orange;
    --pad : 10px;
    --bgcolor : blue;
    --Tcolor : white;
    --op : 0.2;
}
.box {
    border: 2px solid var(--brcolor);
    padding: var(--pad);
    margin: var(--mrg);
    background-color: var(--bgcolor);
    color: var(--Tcolor);
    opacity: var(--op);
}
```

## CSS MEDIA QUERIES

Media queries ka use ham wesite ko responsive banana ke liy karte hai taki hamari wesite computer ke sath - sath phon me bhi achhi dekhe.

Media Queries Sintext - @media (matlab ham media querie likh rhe hai)  
not|only(condition likhte hai jaise(only screen,all,print,speech)) mediatype and  
(expressions){CSS-Code}

Sintaxt - (@media not|only mediatype and (Expressions ) {CSS-Code}

:- ham alag – alag condition ke hisab se mediatype set karte hai jaise -

screen(jab ham sirf screen par ho tab chahe phon screen ya tab,leaptop,pc etc...)

all(sabhi ke liy set karne ke liy)

print(jab ham print window par ho tab)

speech(jo sun nhi sakta hai uske liy ye mediatype hota hai).

```
@media only screen and (max-width: 300px){  
    body{  
        background-color: green;  
    }  
}
```

Explanation :- Jab tak body ki width 300px se badi hai tabtak to kuchh nhi hoga lekin jab body 300px se chhoti hoti hai to body ka bgcolor green ho jay.

Ab jab ham apna page 300px se chhota karenge to body green ho jaygi. Matlab responsive ke hisab se style bhi change hoti rhegi.

```
@media only screen and (max-width: 300px){  
    body{  
        background-color: green;  
    }  
    .box1 {  
        flex-direction: column;  
    }  
}
```

Explanation :- Ham chahe jitna utna @media ka use kar sakte hai – Eska matlab hai ki jo .box1 class hai uski size jab 300px se kam ho jay tab

flex-direction : column me set ho jay.

## SCREEN SIZE BREAK POINTS

Phon divices 455px se niche .

Tablet divices 455px to 750px tak.

Esase badi jitni bhi display hai jaise 1080px tak enki style ham pane hisab se set karte hai.

Altravoid Monitors - Enki width bahut jada hoti hai or esme bhi ham kae media query lagakar use saja sakte hai style kar sakte hai.

## MEDIA QUERIES KA USE HAM BAHUT JADA KARTE HAI.

Orientation:portrait/landscape - es condition ka useham tab karte hai jab hame landscape me alag or portrait me alag sytle krni hoti hai.

```
@media only screen and (orientation: portrait){  
    body{  
        border: 10px solid purple;  
    }  
}
```

Explanation :- Jab hamari body portrait ho tab uspar 10px ka purple border laga do.

Portrait/landscape : - jab hamari portrait value landscape se jada hoti hai to vo **portrait** hota or jab landscape value portrait se jada ho to vo **landscape** hoti hai.

## CSS FLOAT & CLEAR

:- Es properte se ham image ko float & clear value se style karte hai.

Float : left/right – es properte ko jab img par lagate hai to img left me ho jati hai or contain ko right me jagah de deti hai . or box se over flow bhi ho jata hai agar contain bada hai to.kuchh bhi ho jay lekin contain image ke left me hi rhega.(**ESKA USE PAHALE HOTA THA AB BAHUT KAM USE HOTA HAI (ham eska use nhi karenge.)**)

```
img {  
    float: left;  
}
```

Display:flow-root – Jab hamri img container se overflow hoti hai to ham display:flow-root properte kaise karte hai jisase img container ke hisab se fix ho jati hai.

## CLEAR

Clear:right/left – Ham jis element par ye properte lagate hai vo element apne right side me kisi bhi element ko float nhi karne dega.Lekin left me karne dega.

Clear:both – Ye properte apne dono side kisi element ko nhi float karne dega.

## MORE ON CSS SELECTORS

.box:first-child{style} – Ye properte kahati hai ki box agar apne parant ka first-child hai to uspar ye style apply ho jay.

```
.box:first-child {  
    background-color: red;  
}
```

.box:first-line{style} – Ye properte kahati hai box ki first – line par ye style apply kar do.

```
.box:first-line{  
    background-color: yellow;  
}
```

.boxs \*{style} – Ye proerpte kahati hai ki .boxs me jitney bhi element hai sab par style apply kar do.

```
.boxs *{  
    color: white;  
    border: 2px solid black;  
}
```

Data-color="Any text" – Ye element selector hai esase bhi ham style kar sakte hai eska use ham inline me karte hai. or bad me ese target karte hai [braket se]

```
[data-color="amar"]{  
    padding: 10px;  
    border: 2px solid black;  
}
```

Ye attraviewt selector kahat hai ki jis element me data-color="amar" hai uspar ye style apply kar do.

```
Selector grouping - p, h1, .box, [data-color="amar"]{  
  
    padding: 10px;  
    border: 2px solid black;  
}
```

Esame hamne sare element ko group karke select kiya hai (sare p,h1,.box,[data-color="amar"] ko) ak sath sabpar style apply hogi.

.box:nth-child(even/odd){style} – Ye properte .box ke sabhi even elements par style apply karegi or agar odd dete hai to sabhi odd elements par style apply karegi. Matlab jo 1<sup>st</sup> par hai vo to odd hai to 2<sup>nd</sup> vala even hai to espar style apply ho jaygi aise hi jitna even hai sabpar style apply hogi.(even/odd) ke yaha par ham number bhi pass kar sakte hai.

```
.box:nth-child(even){
    color: red;
}
```

.box:nth-child(1){style} – Ye properte .box ke 1<sup>st</sup> element par style apply karegi. Or agar 2 pass karenge to dusre element par style apply hogi.

```
.box:nth-child(1){
    color: red;
}
```

.box:nth-last-child(1){style} – Ye properte .box ke last element par style degi or 2 value dene par last se jo dusre number par hai uspar style apply karega. Agar .box ko chhadkar or bhi koe element hai (p,h1,div,etc...) ye un sab ko bhi ginegi lekin unpar style apply nhi hogi kyuki hamne .box class ko select kiya hai lekin sabhi element ko ginana padega fir koe bhi value deni padegi. Niche se .

```
.box:nth-last-child(1){
    color: red;
}
```

## PSUDO ELEMENTS

.box:before/after{content: "amar is best";} – Ye psudo elements before and after ka use ham **content** ko deinemecle **css** ki madat se inser karne ke liy karte hai. Jaise .box me Rajbhar hai or eske aake mujhe Amar lagana hai to mai before ka use karunga or containt me Amar pass kar dunga . aise hi after ka bhi use kar sakte hai or ham dono ko ak sath bhi use kar sakte hai.

```
.boxs:before{
    content: "amar is best";
    color: green;
}
.boxs:after {
    content: "amar is best";
    color: orange;}
```

.box::selection{style} – Ye properte hamare dvara select kiy gay text par apply hoti hai. jo ham mouse ya Ctrl + A se karte hai.

```
.box::selection{
    color: aqua;
    background-color: black;
}
```

.box::first-letter{style} – Ye properte .box element ke first letter par style apply karti hai.

```
.box::first-letter{
    color: red;
    font-size: 30px;
}
```

## INPUT

```
<input type="text" placeholder="Enter your Name">
```

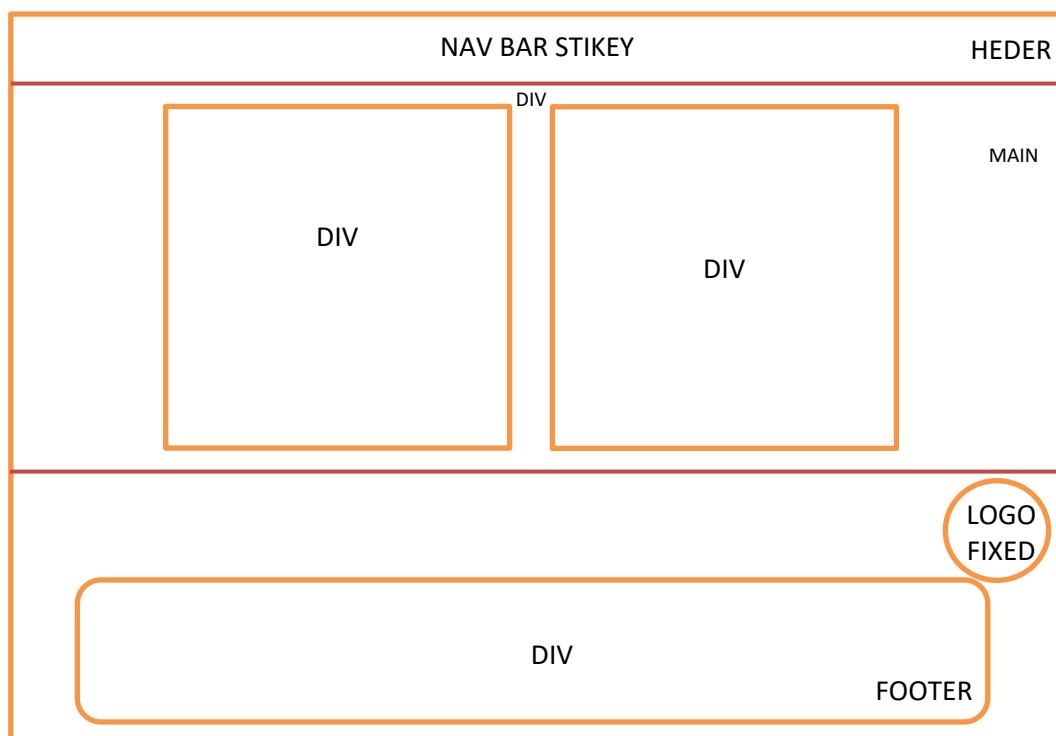
Es properte se ham input box banate hai or place holder se ham input me holder lagate hai.

```
input::placeholder {
    color: blue;
}
```

Es CSS properte se ham placeholder ko style kar sakte hai.

## EXSERSIZE 4 :- CREAT A NAVBAR

## EXSERSIZE 5 :- CREAT A LAYOUT



## FLEX BOX

:- flex box ka use ham kisi bhi box ko kahi bhi set karne ke liy karte hai. Sabse pahale hame kisi bhi box ko flex banana padta hai jiske liy ham (display:flex) properte ka use karte hai. (**Flex properte ham parant par lagate hai items par nhi.**)

**Display : flex** - Agar hame kisi box ke items par flex properte ka use karna hai to ham items ke (**parant**) ko display : flex de dete hai.

```
display: flex;
```

**Justify-content : center** – Ye properte box ke items ko **Main** Acses ke hisab se center karega. (Niche main aces ka dayagram bana hai.)

**Align-items : center** – Ye paroperte box ke items ko verticly center me karti hai.

**Justify-content: flex-end** – Items ko flex ke end me karta hai.

**Justify-content: flex-start** – Items ko flex ke start me karta hai.

**Justify-content: space-around** – Start/End Items ko chhodkar beech ke sabhi items ke aound space deta hai.

**Justify-content: space-between** – Start/End Items ko bilkul space nhi deta bas beech ke Items ko space deta hai.

**Justify-content: space-evenly** – Items me barabr space deta hai.

**Justify-content: right** – Items ko right me shift karta hai.

**Justify-content: left** – (**default properte hai**) Items ko left me shift karta hai.

(Ye sabhi properte horizontal ke liy thi jo **Justify-content** ke andar di jati hai or agar items par verticly ye properties deni hai to **Align-items** me ye properties deni hogi.)

```
justify-content: center;  
align-items: center;
```

**flex-direction – column** – Ye propertie flex ko column me kar deti hai Upar se niche ki or .

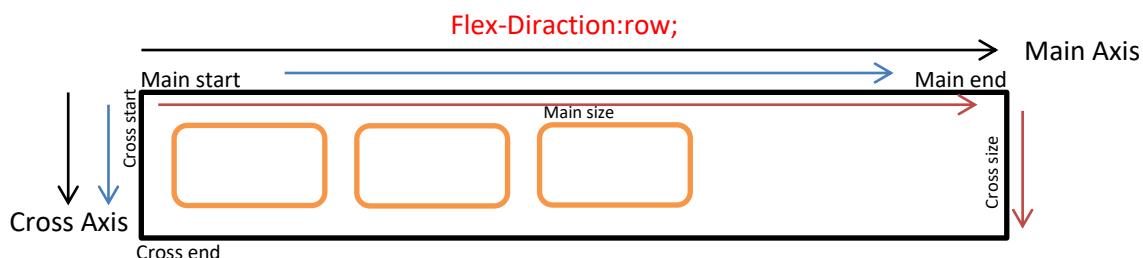
**flex-direction – column-reverse** – Ye propertie flex ke column ko reverse kar deti hai.

Matlab ki

1  
2  
3  
tha to  
3  
2  
1 ho jayga.

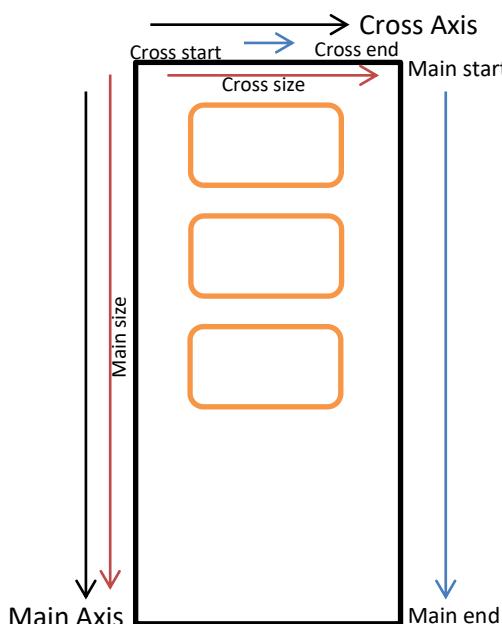
**flex-direction – row** - Esase flex row me ho jata hai left to right . →

**flex-direction-row-reverse** – Esase row reverse ho jati hai right to left ki or. ←



Main Axis – jis taraf hamari flex direction hoti hai vo hamri main axis hoti hai or uske ulta sied cross axis hoti hai. Ese ham change bhi kar sakte hai.

Flex-Diraction:column;



**Flex-wrap:wrap** – Es propertie se items wrap ho jate hai matab ki jab items jarurat se jada ho jate hai or overflow hone lagte hai to ham es propertie ka use karte hai taki items full hone ke bad niche se aana start ho jay.

```
flex-wrap: wrap;
```

**Align-items:center** – jab hamare pas containant 1 line ka hi hai to ham es properte ka use karte hai. ham center ke alava sari propertie ka use kar sakte hai.( flex-end,flex-start etc...).

**Align-content : center** – jab hamare pas containant 1 se jada line ka hota hai tab ham es properte ka use karte hai sabhi lines ko center me karne ke liy. Espar ham sari propertie ka use kar sakte hai(flex-end,flex-start etc...) Sabhi lines ak sath align hongi jaha bhi ham karenge.

**Flex-wrap:wrap-reverse** – Es propertie se content ulta wrap hote hai Pahale agar upar se niche ho rhe the to ab niche se upar honge.



**Flex-wrap: nowrap** – ye default hai wrap nhi karega es propertie se.

**Flex-flow:row/column wrap,wrap-reverse** – Flex-flow me ham do propertie lagate hai Pahale ham row ya column set karte hai first ham use wrap karte hai ya wrap-reverse karte hai.

**Gap:12px** – Ye propertie sabhi items ke beech me gap de deti hai horizontal or verticle. Or esme ham column or row gap bhi de sakte hai.

**row-gap:12px** – Ye propertie sabhi rows ke beech me gap degi.

**Column-gap:12px** – Ye propertie sabhi column ke beech me gap degi.

**Gap: 12px 10px** – Ye short tarika hai gap dene ka pahale row gap hoga 12px fir column gap hoga 10px.

**: - YE SABHI PROPERTIES CONTENER (**PARANT**) KE LIY THI AB ITEM PROPERTIES KO DEKHTE HAI.**

## ITEMS PROPERTIES

**Order-1,2,3...** - Es properte se ham items ka order badhate hai. Jis item ka order jitna jada hoga vo item utna hi bad me aayga. Kyuki flex items ka ak apna order hota hai esliy vo ak line me rahate hai left to right lekin ham unka order badhakar unhe pahale ya bad me la sakte hai. Defoult order 0 hota hai.

**Flex-grow: 1-** Agar hamare pas 4 items hai to unki (default flex-grow: 0) hogi agar ham un 4 items ko flex-grow:1 dete hai to vo 4 items apne hisabse apni size ko fix karke pure page ki width ko gher lenge. Barabr – barabr width charo items lenge. Jaise ham flex:space-evenly ka use karte hai Lekin esme items ke beech me space aata hai or flex-grow :1 se items apni width badha letे hai.

```
flex-grow: 1;
```

**flex-grow:2;** - Agar ham kisi ak item ko ye properte dete hai to vo item 2 items ki jagah lega. 3 dete hai to 3 items ki jagah lega. (ak tipe se murge karna).

```
.item1 {  
    flex-grow: 3;  
}
```

**Flex-shrink:2** – Hamare jitney bhi items hote hai unki Defoult shrink value 1 hoti hai. Or agar kisi ak item ko ye propertie dete hai to vo baki items se duble shrink hoga. Or 3 denge to Tripale shrink hoga. Matlab patla hoga page chhota karne par .

**Align-self:** flex-end Ya any flex Propertie – Align-self se ham item ki position ko set karte hai flex propertie ka use karke lekin container me koe align ya justify properte nhi lagi honi chahiyo.

## CSS GRID

: - Sabse pahale ham box ko display grid propertie dete hai or .CSS GRID ka use ham layout bane ke liy karet hai. Or grid me ham kisi bhi item ko kahi bhi place kar sakte hai. Or esme hame margin ya padding use nhi karni hai gap-column/gap-row/gap ka use karna hai.

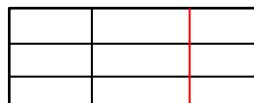
**Display:grid;** - Es properte se hamara continer grid ban jata hai lekin continer me koe change nhi aayga. (inspect karne ke bad grid dikhega.)

**Grid-template-columns: px value, II,II ;** - Esme ham jitni value denge utna columns banega or value jitna denge utna hi box se duri hogi.

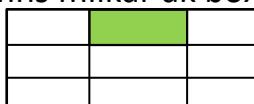
`grid-template-columns: 120px 120px 120px 120px ;`

Esme 4 columns bany gay hai 120px ki duri par aise hi ham jitney chahe utne columns bana sakte hai value kam karne par box ke beech ki doori bhi kam hogi.

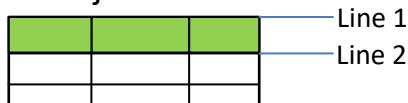
**Grid line** – Jab grid banti hai to row - columns ki lines judkar banti hai.



**Grid Cell** – Jab row – columns milkar ak box banta hai use cell kahate hai .



**Grid Track** - Do lines ko milakar jitne box bante hai unhe track kahate hai.



**Grid Aria** – Tin lines ko milakar jine box bante hai unhe Aria kahate hai.

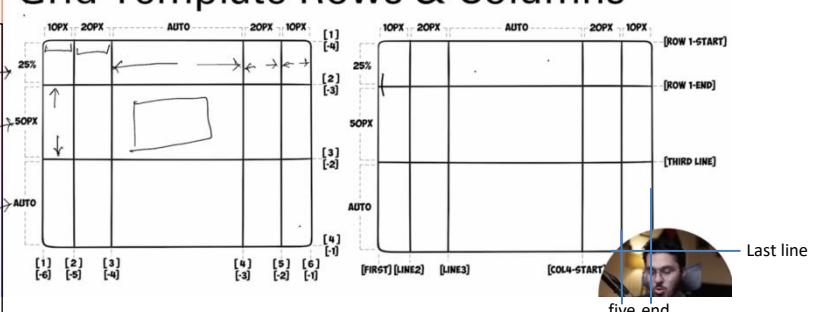


## Grid Template Rows & Columns

:- ham log grid ho row & column me dete hai or jitna row utni value jitna column utna value.

:- 123456 jo hai vo lines hai or lines ki ulti ginti karni hai to -1-2-3-4-5-6 ginti karenge. Lines ko ham apne hisab se bhi name dete hai.

## Grid Template Rows & Columns



**Grid-column: 1,2,3.../1,2,3...;** :- (1/2 – column no 1 se column no 2 tak jao).

Grid column me ham jo number pahale dete hai vha se column ki suruaat hoti hai or jo bad me value dete hai vha par column khatam hota hai.

**Grid-row:1,2,3.../1,2,3...;** :- (1/2 – row no 1 se row no 2 tak jao.) Esase ham row ki value set karte hai. bilkul column jaise hi.

```
.item-6 {  
    grid-column: 1/2;  
    grid-row: 1/2;  
}
```

: - Es kod se jo element .item-6 hai vo column 1 se 2 or row 1 se 2 ki jagaha par chala jayga or vha jo element hoga use said me hata dega.(Or agar ham dono element ko ak hi propertie dete hai to dono element overlap ho jaynge ak dusre par). Ham row / column kahi bhi set kar sakte hai jitna column set karenge utna column marg ho jayga Vaise hi row ko bhi set kar sakte hai.

Jaise (1/3) column line 1 set column line 3 tak jao. Ab ye 1 se 3 tak marge ho jayga. Jitan denge utna tak jayga.

```
.item-6 {  
    /* grid-column: 1/2; */  
    /* grid-row: 1/2; */  
    grid-column-start: 1;  
    grid-column-end: 2;  
    grid-row-start: 1;  
    grid-row-end: 2;
```

Ham ye long method se bhi column / row set kar sakte hai.

**[C/R lines Name]** - Ham grid lines ka name bhi rakh sakte hai jo ham bracket me [name] rakhte hai.Or Name se bhi ham row/column set kar sakte hai.

```
grid-template-columns: [Cpahala] 100px [Cdusra] 100px;  
grid-template-rows: [Rpahala] 50px [Rdusra] 50px [Rtisra] 50px;
```

```
.item-6 {  
    grid-column: Cpahala/Cdusra;  
    grid-row: Rpahala/Rtisra;  
}
```

## Grid Template Areas -

		Navigation bar	
Main content		empty	sidebar
	footer		

Grid template areas :- properite ka use karke ham apne grid ka name rakh sakte hai. Or aria set kar sakte hai.

Jaise – “nav nav nav nav”

“main main empty siderbar”

“footer footer footer footer”

```
.continer {  
    text-align: center;  
    border: 2px solid black;  
    display: grid;  
    grid-template-areas: "nav nav nav"  
                        "main main said"  
                        "footer footer footer";  
}  
.item-1 {  
    grid-area: nav;  
}  
.item-2 {  
    grid-area: main;  
}  
.item-3 {  
    grid-area: said;  
}  
.item-4 {  
    grid-area: footer;  
}
```

**Fr(fraction) unit :-** Ye unit available spce me apni width set kar leti hai, ham jitne fr unit dete hai utne two/column ban jate hai , agar ham fr unit badhkar 2 karte hai to ye pahale box se double width lega.

```
grid-template-columns: 1fr 2fr 1fr 2fr;
```

**Repeat :-** Es function se ham kuchh bhi repeat kar sakte hai jaise agar hame jada columns/rows banana hai to ham eska use karte hai.

:- Agar hame items ko center karna hai to ham flex properties jaise (justify-items/align-items) ka use kar sakte hai Ham justify-content ya align-content ka bhi use kar sakte hai lekin content ka use ham tabhi karte hai jab hamara box bada ho or content chhote hon content ka matlab ki pura grid hi uth kar right ,left , center me hoga Or items ka use karte hai to items grid apne cell mehi right,left,center honge.

Matlab :- Pura grid hilana hai to justify-content/align-content ka use karenge, Or Grid ke cell ke andar hi boxeses ko hilana hai to justify-items/align-items ka use karenge.

```
grid-template-columns:repeat(4, 4fr);
```

Code Matlab : - 4 bar , repeat karo or fr units ke sath 4 columns bana do.

**Minmax(mnValue,mxValue)** – Eska use ham repeat me hi karte hai min value dene or max value dene ke liy.

```
grid-template-columns:repeat(4, minmax(70px,100px));
```

Code Matlab :- hamara box kam se kam 70px takhi chhota hoga or jada se jada 100px tak hi bada hoga. 100px se bada nhi hoga page kitna bhi bada ho jay.

**Place-content :center** - Ye propertie content ko horijontal and verticle dono se center me kar dega.

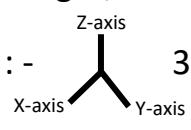
## CSS TRANSFORMS

:- CSS transforms 2 prakar ke hote hai

### 2D Transform

### 3D Transform

2D Transform : -  2D(2dimention) me ham transformation laga sakte hai (slid left,slid right,slid top,slid bottom,Rotate,big,small) etc.. kar sakte hai.

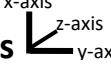
3D Transform : -  3D me ham elements ko 3(Dimention) se Transform kar sakte hai.

**Transform:rotate(40deg);** - Ye propertie Element ko 40 degri par rotate kar degi. (clock vice.)(clock vice nhi karna hai to (-) me value do).

```
transform: rotate(40deg);
```

**Transform:rotate(0.25turn);** : - Es value se element 90 digri par turn ho jayga ham turn me bhi vaslue dete hai (1 se 8) tak to element ka x axis turn hota hai or (15,25,35etc..) value dete hai to y axis bhi turn ho jata hai.

```
transform: rotate(0.25turn);
```

**Rotate X Y and Z axis**  :- Es properte se x ya y axis ko target karke ham kisi ko bhi rotait kara sakte hai.

```
transform: rotateZ(40deg);
```

**Scale(1.5);** - ye propertie element ko 1.5 guna bada kar degi default value 1 hoti hai 1 se jitna upar karenge utna bada hoga hamara element or 1 se jitna chhota karenge utna chhota hoga element.

```
transform: scale(1.5);
```

**Skew(10deg);** - Ye properte element ko upar niche se tirchha kar degi ese ham y axis me bhi kar sakte hai. Lekin x ya z axis me nhi hota hai.

```
transform: skew(10deg);  
transform: skewY(10deg);
```

**Translate(x and Y)(12px ya 12% any value);** - ye proertie element ko translate kar detihai uske position se x ki or ya y ki or.

```
transform: translateY(34px);
```

(Agar hame 1 se jada transform value deni ho to ham space dekar values dete hai.)

```
transform: translateY(34px) skewY(23deg) translateX(100%);
```

**transform-origin(12px 12px any value );** - origin propertie se ham ak point set karte hai or fir ham jo bhi value dete hai hamara element us point ke hisab se hi apni positin ko se karta hai agar hamne origin se ko epoint set kar diya or fir use ghumaynge to to element usi point se ghumta rahega us point ko nhi chhodega.(pahali value left to right point ko set karti hai usri value top to bottom set karti hai or degoult vlue -50 -50 hoti hai)

## TRANSITION

: - Jab hame ak element se dusre element tak jana hota hai to uske bech me ak smooth transition lagane ke liy transition ka use karte hai. Kisi bhi element par transition lagane ke liy 4 properties ka use karna hota hai.

**(transition-property : ; , transition-duration: ; , transition-timing-function : ; , transition-delay : ;)**

**Transition-property** – Kis property par transition lagana hai.

**Transition-duration** – Kitne der tak transition chalna chahiya.

**Transition – timing – function** : (linear) karna hai Ya (ease-in-out) ya (Fast-Out,Linear In) ya (ease-out) karna hai. Ye sab animation laga sakte hai chrom par jakar ham apna timing function(**cubic-bezier(transitions value)**) bana sakte hai. Shlow fast jaisa chahe vaisa.

**Transition-delay** – Kitne der bad transition start hogा.

```
.box {  
    background-color: lightgray;  
    height: 55px;  
    width: 55px;  
    margin: 10px;  
    transition-property: transform;  
    transition-duration: 2s;  
    transition-timing-function: ease-in-out;  
    transition-delay: 0.5s;  
}  
.translate {  
    transform: translateX(30%) translateY(30%);  
}
```

**.translate** – Es class me ham jo bhi property lagaynge vo sab transition ke sath apply honge jaise agar bg color change karte hai to vo bhi aaram se change hogा transition ke sath or text color change karenge to vo bhi aaram se change hogा aise hi jitni property lagaynge vo sasb apply hogi transition ke sath.

**(lekin properte me hame sabko target karna hoga jo bhi property ka se ham .translate class me karenge unko transition-property : me likhna padega; (Eska ak short tarika ham transition-property : me (all) value ka use kar sakte hai to sari value apply ho jaygi))**

```
.box {  
    background-color: lightgray;  
    height: 55px;  
    width: 55px;  
    margin: 10px;  
    transition-property: all;  
    transition-duration: 2s;  
    transition-timing-function: ease-in-out;  
    transition-delay: 0.5s;  
}  
.translate {  
    transform: translateX(30%) translateY(30%);  
    color: white;  
    background-color: blue;  
    font-weight: bold;  
}
```

**Short form transition** – 4ro property k oak sath lagane ke liy transition: val val val val; space dekar 4ro property de dete hai.

```
transition: all 2s linear 1s;
```

## ANIMATION

: - Animation or transition me fark – animation me ham multiple animation laga sakte hai or set kar satke hai kaha se kaha tak kitne second tak etc... Animation lagane ke liy keyframe ka use karte hai jiska identifier name ham kuchh bhi rakh sakte hai. Animation ham ak hi banate hai or uske identifier name se use kisi bhi element par use kar sakte hai Lekin us element par hame animation name , duration, count, etc.. sab apne hisab se set karna hoga.

```
@keyframes amarkaanimation {  
    from{  
    }  
    to {  
        transform: translateX(1000px);  
    }  
}
```

**Matlab** – keybraces ke bad ham kuchh bhi name rakh satke hai – from ka matlab ki (yaha se suru karna hai) to ka matlab (yaha tak jana hai). keyframes me transformation lagane ke bad ye abhi kam nhi karega ese animation property me define karna padega. Box me jispar animation lagana hai.

```
animation: name duration timing-function delay iteration-count direction fill-mode;
```

VS code bata rha hai ki pahale name fir duration fir timing-function etc.. Ham ak hi animatin banate hai or uske identifier name se kisi bhi element par us animation ka use kar sakte hai .(Jis element par animation use karna hai uspar ham animation property ka use karke sari value dete hai apne hisab se Agar koe value nhi dete hai to bhi hamara animation chalta hai.) Hame jitni jarurat hai utni values ka use karte hai.

Animation me hame ye sab set karna hota hai.

```
.box {  
    height: 60px;  
    width: 60px;  
    background-color: green;  
    animation: amarkaanimation;  
    animation-duration: 3s;  
    animation-iteration-count: infinite;  
}  
@keyframes amarkaanimation {  
    from{  
    }  
    to {  
        transform: translateX(1000px);  
    }  
}
```

**: - Animatin-transition-count** – Esme ham jitna number denge utni bar animation chalega or infinite denge to hamesa chalega.

Animation ko bhi ham chrom me apne hisab se bana sakte hai transition ke jaise.

**Animation-direction : reverse** – Ye property use karne ke bad animation ulta start hogा.

**Animation-direction : alternet-reverse** – Ye property use karne ke bad animation ulta start hogा or takrakar vapas chala jayga.

```
animation-direction: alternate-reverse;
```

**Animation-play-state : running / paused** ; - Es property se animation ko run ya pause kar sakte hai.

```
animation-play-state: paused;
```

```
animation-fill-mode: forwards;
```

Es properte se Animation chalega or last me jakar ruk jayga.(ye property lagane se pahale ye vapas retain ho ja rha tha matlab jaise ho ja rha tha jaise ki box ko koe value hi nhi di hai).

```
animation-fill-mode: backwards;
```

Es properte se Box firse backwords ho jayga or retain ho jayega matlab ki vo firse full jayga ki uspar koe value bhi lagi hai or pahale jaisa ho jayga.

**Ham animation from / to ki jagah par - (%) me bhi animation de sakte hai ki 1% par kitna fir 10% par kitna 100% par kitna etc...**

```
@keyframes amarkaanimation {  
    0%{  
        transform: rotate(100deg);  
        background-color: red;  
    }  
    10%{  
        transform: rotate(200deg);  
        background-color: green;  
    }  
    70%{  
        transform: rotate(250deg);  
        background-color: yellow;  
    }  
    90%{  
        transform: rotate(300deg);  
        background-color: orange;  
    }  
    100%{  
        transform: rotate(400deg);  
        background-color: gray;  
    }  
}
```

**Animation lagane ke bad hame element par bhi animation value deni hogi.**

```
animation: amarkaanimation 3s cubic-bezier(0.24, 1.01, 0, 0.84) 1s  
1 backwards;
```

**Aise bhi value de sakte hai ya long method se bhi de sakte hai.**

**Agar multiple Animation lagani hai ak hi element par to ham (,) se seprat kar dete hai sare animations ko fir dusra identifier name likhte hai or uska animation likhte hai.**

```
animation: amarkaanimation 3s cubic-bezier(0.24, 1.01, 0, 0.84) 1s 1
backwards,
amaranm 2s ease-in-out 1s 2;
}

@keyframes amaranm {
    from {

    }
    to{
        transform: translateX(300px);
    }
}

@keyframes amarkaanimation {
    0%{
        transform: rotate(100deg);
        background-color: red;
    }
    10%{
        transform: rotate(200deg);
        background-color: green;
    }
    70%{
        transform: rotate(250deg);
        background-color: yellow;
    }
    90%{
        transform: rotate(300deg);
        background-color: orange;
    }
    100%{
        transform: rotate(400deg);
        background-color: gray;
    }
}
```

**Aise hi ham multiple animations laga sakte hai.**

## OBJECT FIT AND OBJECT POSITION

:- Enka use ham objects par karte hai Enka default value (fill) hota hai.

Img ko agar uske rasio ke sath Fit karna hai ya kisi box me img ko bas Fit karna ho chahe img ka rasio sahi ho ya na ho Or object ka position bhi set karte hai.

**Object-fit: cover;** - Jab ham image ko width height dete hai hai to image ka rasio bigad jata hai or (cover) properte ka use karne se ye property hamne jo width heath di hai uske hisab se cover kar degi image ko bada karke usme fit kar dega image ke rasio ke hisab se.Matlab ki image ko cut karke set karega uske rasio ko chahe image achhe se dikhe ya nhi.

```
.contener img {  
    width: 300px;  
    height: 400px;  
    object-fit: cover;  
}
```

**object-fit: contain;**

Es property se image kategi nhi box ke andar fit ho jaygi lekin box me space bach jaygi.

```
object-fit: cover;  
object-position: top right;
```

Es property se jo image cut rhi thi use ham set kar sakte hai ki kaha se dikhna chahiya or kaha se katna chahiya.(top,right,left,bottom,right,left) etc...

**object-fit: fill;**

Defoult Value

**object-fit: scale-down;**

Esase image scales down ho jaygi niche.

**object-fit: none;**

Esase image Reset ho jaygi jaisi thi vaisi.

```
object-fit: cover;  
object-position: 10px 20px;
```

Es property se (left) se 10px or (top) se 20px image shift ho jaygi. Or ab esi position se sari property ke hisab se khud ko fit karegi.Ese ham (%) me bhi de sakte hai (agar dono property ko 50% de dete hai to image box ke center me aajaygi).

```
background-image:url("poshpa2.jpg");
object-position: center center;
```

Es property se ham box me Duble Quwat ke andar url dete hai or background me image lagate hai or us image ko bhi ham object-fit Or object-position ka bhi use kar sakte hai Ham 50% ki jagah par center center bhi de sakte hai.

Jab ham chhoti image lagate hai tab vo image repeat hoti hai X or Y dono me repeat hoti hai .

```
background-repeat: no-repeat;
```

Es property se image repeat nhi hogi.

```
background-repeat: repeat-x;
```

Es property se image sirf X me repeat hogi.

```
background-repeat: repeat-y;
```

Es property se image sirt Y me repeat hogi.

## FILTERS

:- filter se ham elements ya images par filter lagate hai jaise Contrast , Blur , Bland etc....

**Filter : blur(value);** - Es property se ham image par blur lagate hai.

```
.contener img {
    filter: blur(10px);
}
```

```
filter: contrast(200%);
```

Es property se image par contrast lagate hai 100 Se upar denge to contrast hoga kam karene ko contrast kam hoga.(Or Esme ham (%) me value dete hai).

```
filter: brightness(222%);
```

Esase image ki brightness badate hai or 100 se kam value denge to kam bhi kar sakte hai.

:- Agar multiple filters lagane hai to space ka use karte hai.

```
.img2 {
    filter: brightness(222%) contrast(133%) blur(4px);}
```

```
filter: grayscale(50%);
```

Ye property image ko blackAndWhite karti hai.

```
filter: sepia(50%);
```

Ye property iamge ko thoda yellow or temperature high yani purani film type ho jati hai.

```
filter: drop-shadow(3px 4px 5px green);
```

Ham pahale jaise shadow padhe hai vaise hi ham es shadow ka bhi use karte hai.

```
filter: invert(1);
```

Ye iamge ko invert karta hai Jaise purani NINGATIVE hoti thi camra ki.

```
filter: opacity(50%);
```

Ye opacity set karta hai.

```
filter: saturate(10%);
```

Ye saturate karta hai.

**Congratulatin CSS is Complited** Learn more face problems and solve.

Home works :- Amazone Clon, Netflix Clon and anything clon.

