CSS

- **Design the below equation using HTML & CSS**

```
HTML
12          font-size: 40px;
13          font-weight: 900;
14      }
15      .sup {
16          font-size: 30px;
17      }
18      .first {
19          border-bottom: 2px solid;
20      }
21      table {
22          margin-left: 50px;
23      }
24      th {
25          padding: 5px;
26      }
27      </style>
28  </head>
29  <body>
30      <table>
31          <tr>
32              <th>
33                  <div class='first'>∂<sup class='sup'>2</sup>u</div>
34                  ∂t<sup class='sup'>2</sup>
35              </th>
36              <th>
37                  = C<sup class='sup'>2</sup>
38              </th>
39              <th>
40                  <div class='first'>∂<sup class='sup'>2</sup>u</div>
41                  ∂x<sup class='sup'>2</sup>
42              </th>
43          </tr>
44      </table>
```

1. Paragraph

Live Preview

$$\frac{\partial^2 u}{\partial t^2} = C^2 \frac{\partial^2 u}{\partial x^2}$$

[Equation.html](#)

- **Write a CSS rule of rounded rectangle, dashed border, grayscale for all image tags in your webpage**

```css
img {
    border: 5px dashed black;
    border-radius: 10px;
    filter: grayscale();
}
```

- **Write a media rule to change only the font size of web page when it's resized**

- **Use HTML and CSS to display different types of cursors**

```html
<!DOCTYPE html>
<html>
<head>
  <style>
    * {
```

```css
    font-size: larger;
}
.alias {cursor: alias;}
.all-scroll {cursor: all-scroll;}
.auto {cursor: auto;}
.cell {cursor: cell;}
.context-menu {cursor: context-menu;}
.col-resize {cursor: col-resize;}
.copy {cursor: copy;}
.crosshair {cursor: crosshair;}
.default {cursor: default;}
.e-resize {cursor: e-resize;}
.ew-resize {cursor: ew-resize;}
.grab {cursor: -webkit-grab; cursor: grab;}
.grabbing {cursor: -webkit-grabbing; cursor: grabbing;}
.help {cursor: help;}
.move {cursor: move;}
.n-resize {cursor: n-resize;}
.ne-resize {cursor: ne-resize;}
.nesw-resize {cursor: nesw-resize;}
.ns-resize {cursor: ns-resize;}
.nw-resize {cursor: nw-resize;}
.nwse-resize {cursor: nwse-resize;}
.no-drop {cursor: no-drop;}
.none {cursor: none;}
.not-allowed {cursor: not-allowed;}
.pointer {cursor: pointer;}
.progress {cursor: progress;}
.row-resize {cursor: row-resize;}
.s-resize {cursor: s-resize;}
.se-resize {cursor: se-resize;}
.sw-resize {cursor: sw-resize;}
.text {cursor: text;}
.url {cursor: url(myBall.cur),auto;}
.w-resize {cursor: w-resize;}
.wait {cursor: wait;}
.zoom-in {cursor: zoom-in;}
.zoom-out {cursor: zoom-out;}
```

```html
    </style>
</head>
<body>
    <p class="alias">alias</p>
    <p class="all-scroll">all-scroll</p>
    <p class="auto">auto</p>
    <p class="cell">cell</p>
    <p class="context-menu">context-menu</p>
    <p class="col-resize">col-resize</p>
    <p class="copy">copy</p>
    <p class="crosshair">crosshair</p>
    <p class="default">default</p>
    <p class="e-resize">e-resize</p>
    <p class="ew-resize">ew-resize</p>
    <p class="grab">grab</p>
    <p class="grabbing">grabbing</p>
    <p class="help">help</p>
    <p class="move">move</p>
    <p class="n-resize">n-resize</p>
    <p class="ne-resize">ne-resize</p>
    <p class="nesw-resize">nesw-resize</p>
    <p class="ns-resize">ns-resize</p>
    <p class="nw-resize">nw-resize</p>
    <p class="nwse-resize">nwse-resize</p>
    <p class="no-drop">no-drop</p>
    <p class="none">none</p>
    <p class="not-allowed">not-allowed</p>
    <p class="pointer">pointer</p>
    <p class="progress">progress</p>
    <p class="row-resize">row-resize</p>
    <p class="s-resize">s-resize</p>
    <p class="se-resize">se-resize</p>
    <p class="sw-resize">sw-resize</p>
    <p class="text">text</p>
    <p class="url">url</p>
    <p class="w-resize">w-resize</p>
    <p class="wait">wait</p>
    <p class="zoom-in">zoom-in</p>
```

```
    <p class="zoom-out">zoom-out</p>
</body>
</html>
```

- **Write a CSS class that meets the Box Model requirement for all the div tags in your page**
  - Use certain properties padding, margin

```
div.box {
  background-color: lightgrey;
  width: 300px;
  border: 15px solid green;
  padding: 50px;
  margin: 20px;
}
```

- **Write a CSS class to change size of font, color, font-family when moves over of span tag**

```
span:hover {
  color: red;
  font-size: larger;
  font-family: 'Times New Roman', Times, serif;
}
```

- **Write a CSS 2D rule with translate() property to move an element**

```
h1 {
      transform: translate(30px, 40px);
}
```

- **Define a CSS class to show tooltip when mouse moved over the elements**

```
<h1 title="Enthusiastic Web Developer">Sandesh</h1>
```

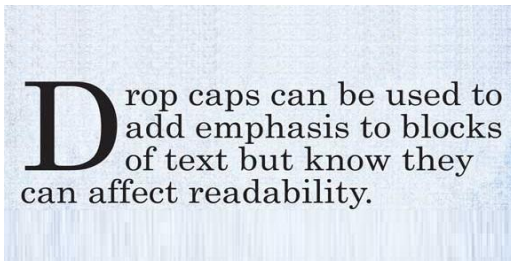- **For the below shown image, apply clip property with values of right & bottom and display the output**

```css
img {
    position: absolute;
    clip: rect(0px, 110px, 150px, 0px);
}
```

Output:

- **Display the below image using HTML and CSS**


```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
```
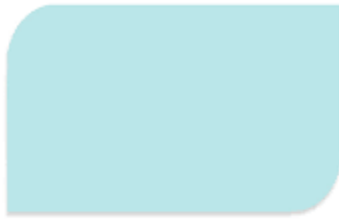
```html
    <link
href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-beta2/dist/css/bootstrap
.min.css" rel="stylesheet"
integrity="sha384-BmbxuPwQa2lc/FVzBcNJ7UAyJxM6wuqlj61tLrc4wSX0sz
H/Ev+nYRRuWlolflfl" crossorigin="anonymous">
    <style>
        p:first-child:first-letter {
            font-size: 8rem;
            float: left;
            margin: 0.1rem 0.1rem 0.2rem 0;
            line-height: 1;
        }
        div {
            background-color: rgb(216, 213, 213);
        }
        p {
            font-family: Georgia, 'Times New Roman', Times, serif;
            font-size: 1.9rem;
        }
    </style>
</head>
<body>
    <div class="container">
        <p>
        Drop caps can be used to <br>
        add emphasis to blocks <br>
        of text but know they <br>
        can affect readability.
        </p>
    </div>
</body>
</html>
```

- **Use the required property to reshape a div, as example shown below**


```css
:required {
        border-top-left-radius: 25px;
        border-bottom-right-radius: 25px;
}
```

- **Use CSS to set a background image should be centered and should not repeat**

```css
body {
        background: url('Jack- Falahee.jpg');
        background-repeat: no-repeat;
        background-position: center;
        background-attachment: fixed;
}
```

- **Write CSS rules to set the direction of the flexible items inside the div element in reverse order**

```css
#main {
 width: 200px;
 height: 200px;
 border: 1px solid #c3c3c3;
 display: flex;
 flex-direction: row-reverse;
}
```

- **Give the div element an image border using the image "border.png". Slice the image at 30px and stretch it**

```css
div {
        width: 200px;
        height: 200px;
        border: 5px solid;
        border-image: url(border.png) 30 stretch;
}
```

- **Give the div element a rounded corner (25px radius) on the bottom left side**

```css
div {
        height: 200px;
        width: 200px;
        background-color: brown;
        border-bottom-left-radius: 25px;
}
```

- **Remove the transparency/opacity of the <img> element when the user hovers over it with the mouse pointer**

```css
img {
    opacity: 0.4;
}
img:hover {
    opacity: 1.0;
}
```

- **Position the div element all the way to the right using absolute positioning**

```css
.relative {
  position: relative;

  width: 500px;
  height: 400px;
  background-color: darkblue;
}
.absolute {
  width: 200px;
  height: 150px;
  background-color: cyan;
  position: absolute;
  right: 0;
}
```

- **Add a scrollbar to the div element**

```css
div {
  width: 150px;
  height: 100px;
  background-color: brown;
  color: cyan;
  overflow: scroll;
}
```

- **Set a linear background for the div element, going from the top to bottom, transitioning from white to red to blue to green**

```css
div {
  width: 200px;
  height: 200px;
  background: linear-gradient(to bottom, white, red, blue, green);
}
```

- **With the transform property, rotate the <div> element 45 degrees**

```css
div {
        width: 200px;
        height: 200px;
        background: blue;
        transform: rotate(45deg);
}
```