#### **Explain Font Size?**

Font size property in css can change the font size of fonts. By default, all html elements are having their own font size set by useragent (browser).

Default Font size of root element html is 16px, p tag is 1em and h1 tag is 2em.

The popular units for CSS fonts size are em and px. The Top 5 font-size font-size units are.

#### Font Size values in CSS

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Pixels  $(px) \rightarrow As$  per height of screen pixels

 $Em(em) \rightarrow Relative to nearest parent.$ 

Points (pt)  $\rightarrow$  Fixed unit n points

Percentage (%)  $\rightarrow$  Relative to parent element.

**Note:** em is relative to parent element, but rem is relative to html element only.

#### **Example:**

```
<div style="font-size:16px">
  Font size 16px 
  Font size 1em 
  Font size 100% 
  Font size 12pt 
  </div>
```

**Note:** If font-size of parent element is more than 100% or 16px, em and % will change, but px, pt and rem remains same.

#### Q. Explain Absolute Font Size?

Font Size can have absolute size values. There are total 8 absolute size values in css between small to large.

#### **Example**

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Font Size</title>
</head>
<body>
  <div style="font-size:32px">
     Font size 16px 
     Font size 1em 
     Font size 100% 
     Font size 12pt 
  </div>
</body>
</html>
```

#### Q. Explain Relative Font Size?

Font Size can have relative size values. There are 2 relative size values in css, smaller and larger.

#### Q. Explain Font Weight?

It used to specify the boldness of the font.

In CSS, Font weight is used to give Bold or Bolder appearance to search font. Various value of font-weight are

Values: lighter | normal | bold | bolder | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900

#### **Example**

#### Q. Explain Font Style?

It used to specify the style of the text to be displayed

#### Values: normal | italic | oblique

#### **Example**

### Q. Explain Font Family?

It used to specify the font to be applied to the content of an HTML element

Values: specific font name (i.e. font face), specific font family name, generic font family name

#### **Example:**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Font Family</title>
    <style type="text/css">
        p{
           font-size: 20px;
           font-weight: bold;
           font-style: normal;
           font-family: 'Franklin Gothic Medium', 'Arial Narrow', Arial,
sans-serif;
           color: #ffe33f;
    </style>
</head>
<body>
    Font size 16px 
    Font size 1em 
</body>
</html>
```

#### **Alternative Font:**

We can also use two or more font-family for alternative fonts. This technique is really helpful and mostly recommended. System will pick first font. If it's not available, the next alternative will be picked.

#### **Example:**

```
<style>
body{ font-family: 'helvetica neue', helvetica, sans-serif}
</style>
```

## **CSS Background Images**

#### How to add images in CSS Background?

CSS can use both colors and images in backgrounds. <u>CSS3 Gradients</u> were introduced later on, and they behave same like **backgrounds images**.

**Background colors** can have any color name, hexacode or rgb color code. **Background Colors** occupy full width of Border Box.

**Background images** are also used with background. Images like JPG, PNG and GIF can be used as **background images**. These images can repeat in x-axis, y-axis or no repeat, can change position and can be attached fixed to screen.

### **Background Properties:**

#### **Background Color**

**Background color** property is used to change **background color**. **Background color** can have either **color name** or **color code**. Only one background color can be used for a single element. See example

```
.wrap1{
    height:100px;
    background-color:red;
}

</style>
<div class="wrap1">
    Div Wrap 1 with background red.
</div>
```

### **Example**

<!DOCTYPE html>

```
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <style>
        .wrap1{
            height:100px;
            background-color:rgb(131, 10, 10);
            color: white;
            font-size: 16px;
    </style>
</head>
<body>
    <div class="wrap1">
        >
           Hello html programming
        </div>
</body>
</html>
```

#### **Background Image**

**Background images** are also used to set backgrounds in css. Popular image extension like, JPG, PNG, GIF and svg can be used for **background images**. To set **background image**, use URL(path of image). See example,

```
<style>
    .wrap2{
        height:100px;
        background-image:url(images/bg.png);
    }
</style>
<div class="wrap2"></div>
```

#### **Background Repeat:**

**Background repeat** property controls repetition of a background image. Default value of **background repeat** is repeat. Other values are:

```
> repeat
> no-repeat
> repeat-x
> repeat-y
```

#### **Repeat**

**Repeat** is the default value of all **background images**. All background images will repeat in both x and y direction to cover whole area. See example

```
.wrap3{
    height:100px;
    background-image:url(images/);
    background-repeat:repeat;
}

</style>
</div>
</div>
```

#### **No Repeat**

**background-repeat: no-repeat** can stop image from repeating in x and y direction of background. Thus remaining area is transparent. But we can add background color in remaining transparent area.

#### Repeat-x

**repeat-x** will repeat background image in x axis only.

```
<style>
.wrap5{
   height:200px;
   background-image:url(images/bg.png);
   background-repeat:repeat-x;
}
</style>
<div class="wrap5">
</div></div>
```

## Repeat-y

repeat-y can repeat background image in y axis only.

```
<style>
.wrap6{
   height:200px;
   background-image:url(images/favicon.ico);
   background-repeat:repeat-y;
   }
</style>

<div class="wrap6">
</div>
</div>
```

#### **Example:**

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <style>
        .wrap2{
            height:600px;
            background-image:url(imgs/2.jpg);
            background-size: 300px;
            background-repeat: no-repeat;
            background-position: center;
    </style>
</head>
<body>
    <div class="wrap2">
    </div>
</body>
</html>
```

#### **Background Position:**

**Background Position** tells position of background image. The default the **background position** is left top.

**Background position** can have two values, one for x-axis and second for y-axis. These values can be *left*, *right* and *center* for x-axis, and *top*, *center* and *bottom* for y-axis. px and % cam also be used.

```
<style>
.wrap7{
   height:200px;
   background-image:url(images/bg.png);
   background-repeat:no-repeat;
   background:color:#ddd;
   background-position:left top;
   }
</style>
<div class="wrap7"></div>
```

#### **Background Attachment:**

**Background Attachment** property tells whether a background image should scroll or remain fixed on scrolling down window. The default value is scroll.

### **Background Attachment Values**

- ScrollFixed
- **Background Attachment Scroll**

**Background-attachment scroll** is default value of all background images. These images scroll when browser windows scroll.

```
<style>
.wrap8{ height:200px;
   background-image:url(images/box-model.png)
   background-attachment:scroll;
}
</style>
<div class="wrap8"></div>
```

## **Background Attachment Fixed**

**Background-position fixed** is another value of **background attachment** which fixed the background image. While scrolling, image remain fixed and content slides on it making parallax effect.

```
<style>
.wrap9{ height:200px;
   background-image:url(images/box-model.png)
   background-attachment:fixed;
}
</style>
<div class="wrap9"></div>
```

## **Background**

The background property is actually a shortcut of background-image, background-repeat, background-position, background-attachment and background-color. This is the most preferred way to change background properties as a single property can change five properties. See example

```
<style>
.wrap11{
   height:200px;
   background:url(images/box-model.png) repeat left top fixed #ccf;
}
</style>
<div class="wrap11"></div>
```

# **CSS List Style**

**CSS** List Style Property is used to change list style type / list style image and list style position of HTML Lists. Till HTML4/ XHTML, type attribute can change list style of list using type attribute. But in HTML5, type attribute on unordered list is depreciated and we have to use **css** list style property.

## **CSS List Style properties**

#### 1. List Style Type

**List Style type** property is used to change type of bullet style in list which is by default disc in and 1 in . There are so many values for **list style type. We can also set custom list style**.

## **List Style for Unordered List**

List Style Type	Use	Example
none	to remove list style	<ul><li>List style none</li><li>List style none</li></ul>
disc	a filled circle	<ul><li>List disk</li><li>List disk</li></ul>
circle	a hollow circle	<ul><li>List circle</li><li>List circle</li></ul>
square	a filled square	<ul><li>List square</li><li>List square</li></ul>

## **List Style for Ordered List**

List Style Type	Use	Example
decimal	decimal numbers	<ol> <li>List decimal</li> <li>List decimal</li> </ol>

decimal-leading- zero	decimal started with zero	<ul><li>decimal leading zero</li><li>decimal leading zero</li></ul>
lower-roman	lowercase roman	i. lowercase roman ii. lowercase roman
upper-roman	uppercase roman	I. uppercase roman II. uppercase roman
lower-greek	greek i.e. alpha, beta, gamma	<ul><li>lower greek</li><li>lower greek</li></ul>
lower-alpha	Lowercase alphabets	a. lower alpha b. lower alpha
upper-alpha	Uppercase alphabets	A. upper alpha B. upper alpha
devanagari	devanagari characters ( for hindi & sanskrit )	<ul><li>devanagari</li><li>devanagari</li></ul>

## **List Style Image**

List style image property is used to add image in list style. For a single list, either list style type or list style image is used. We can't use both together.

To use list style image, always use a small image. If image size is large, all list item will expand.

```
<style>
    ul{ list-style-image:url(img/arrow1.png);}
</style>
```

## **List style Position**

**List Style Position** property change position of list style type or image from outside to inside. The default value of **list style position** is outside.

## **List Style Outside**

```
<style>
    ul{
        list-style-position:outside;
        padding:0;
        border:1px solid #333;
    }
    ul li{
        border:1px solid #333;
        padding:5px;
    }
</style>
```

## **List Style Inside**

```
<style>
    ul{
        list-style-position:inside;
        padding:0;
        border:1px solid #333;
    }
    ul li{
        border:1px solid #333;
        padding:5px;
    }
</style>
```