**Question # 1 what are group selectors also discuss some properties of CSS background, colors and their syntaxes. Also discuss RGB values and CSS fonts?**

Answer **selectors**

Selectors are used to "select" the elements on an HTML page that are affected by rules. When several selectors share the same declarations, they may be grouped together to save writing the same rule more than once. Each selector must be separated by a comma. They can also include a wide range of selectors.

For example:

**h1, h2, h3, h4** { padding: 1em; }  
**.highlight p, .highlight ul** { margin-left: .5em; }  
**#main p, #main ul** { padding-top: 1em; }

**Background Properties**

|  |  |  |
| --- | --- | --- |
| Value | Description |  |
| [background-color](http://www.w3schools.com/cssref/pr_background-color.asp) | Specifies the background color to be used  background-color: yellow; |  |
| [background-image](http://www.w3schools.com/cssref/pr_background-image.asp) | Specifies ONE or MORE background images to be used |  |
| [background-position](http://www.w3schools.com/cssref/pr_background-position.asp) | background-image: url("paper.gif");  Specifies the position of the background images |  |
| [background-size](http://www.w3schools.com/cssref/css3_pr_background-size.asp) | background-image: url('smiley.gif');     background-repeat: no-repeat;     background-attachment: fixed;     background-position: center;  Specifies the size of the background images |  |
| [background-repeat](http://www.w3schools.com/cssref/pr_background-repeat.asp) | background: url(img\_flwr.gif);     background-size: 80px 60px;     background-repeat: no-repeat;  Specifies how to repeat the background images |  |
| [background-origin](http://www.w3schools.com/cssref/css3_pr_background-origin.asp) | background-image: url("paper.gif");     background-repeat: repeat-y;  Specifies the positioning area of the background images |  |
| [background-clip](http://www.w3schools.com/cssref/css3_pr_background-clip.asp) | background:url(img\_flwr.gif);     background-repeat: no-repeat;     padding:35px;     background-origin: content-box;  Specifies the painting area of the background images |  |
| [background-attachment](http://www.w3schools.com/cssref/pr_background-attachment.asp) | border: 10px dotted black;     padding:35px;     background: yellow;     background-clip: content-box;  Specifies whether the background images are fixed or scrolls with the rest of the page |  |
| Initial | background-image: url('zwwe.gif');     background-repeat: no-repeat;     background-attachment: fixed;  Sets this property to its default value. |  |
| Inherit | Inherits this property from its parent element. |  |

Background colors

The background-color property sets the background color of an element. The background of an element is the total size of the element, including padding and border (but not the margin).

Examples

background-color: yellow;  
background-color: #00ff00;

background-color: rgb(255,0,255);

**RGB colors values**

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Name  White | Hex code  #FFFFFF | Decimal code  (255,255,255) |
| Red | #FF0000 | (255,0,0) |
| Lime | #00FF00 | (0,255,0) |
| Blue | #0000FF | (0,0,255) |

**Question #2 Discuss the setters CSS images, what is Opacity? How you describe moz-Opacity property? :link, :Visited , :hover,: active what are these.**

Answer The background-**image** property sets one or more background **images** for an element. The background of an element is the total size of the element, including padding and border (but not the margin). By default, a background-**image** is placed at the top-left corner of an element, and repeated both vertically and horizontally.

Opacity

The **opacity** property in **CSS** specifies how **transparent** an element is. Basic use: div { **opacity**: 0.5; } **Opacity** has a default initial value of 1 (100% opaque). **Opacity** is not inherited, but because the parent has **opacity** that applies to everything within it.

Moz-opacity property

The**–moz- opacity**

Property fo an image is used to set the opacity of an image . This property is used to create a transparent image in Mozilla.IEusesfilter:alpha(opacity=x) to create Transparent images.

:Link

This allows you to set styles for links that have not yet be unvisited.

:Visited

This allows you to set styles for links that have been clicked on.

:Active

This Is applied when an element is being activated by a user. For e.g . When a button is being pressed or link being clicked.

**Question # 3 Discuss border-collapse, border-spacing, caption-side, empty-cells, and table-layout. Also describe in detail border properties.**

Answer Border-collapse

The **border**-**collapse** property is for use on <table> elements (or elements made to behave like a table through display: table or display: inline-table ). There are two values: separate (default) - in which all table cells have their own independent borders and there may be space between those cells as well.

Example

    border-collapse: collapse;

**Border-spacing**

The **border**-**spacing** property sets the distance between the **borders** of adjacent cells (only for the "separated **borders**" model).

Example

table {  
    border-collapse: separate;  
    border-spacing: 10px 50px;  
}

Caption-side

The **caption**-**side** property specifies the placement of a table **caption**. Default value: top.

Example

caption {

caption-side: bottom;

}

**empty-cells**

The **empty-cells** CSS property specifies how user agents should render borders and backgrounds around cells that have no visible content.

Example

table {  
    border-collapse: separate;  
    empty-cells: hide;  
}

**Table-layout**

An automatic **table layout** algorithm is commonly used by most browsers for **table layout**. The width of the **table** and its cells depends on the content thereof. ... **Table** and column widths are set by the widths of **table** and col elements or by the width of the first row of cells.

Example

table {  
    table-layout: fixed;  
}

**BorderPorperties**

The **border** CSS **property** is a shorthand **property** for setting the individual **border property** values in a single place in the style sheet. **border** can be used to set the values for one or more of: **border**-width , **border**-style , **border**-**color** .

Border Style

The border-style property specifies what kind of border to display.

The following values are allowed:

dotted - Defines a dotted border

dashed - Defines a dashed border

solid - Defines a solid border

double - Defines a double border

groove - Defines a 3D grooved border. The effect depends on the border-color value

ridge - Defines a 3D ridged border. The effect depends on the border-color value

inset - Defines a 3D inset border. The effect depends on the border-color value

outset - Defines a 3D outset border. The effect depends on the border-color value

none - Defines no border

hidden - Defines a hidden border

The border-style property can have from one to four values (for the top border, right border, bottom border, and the left border)

Example

p.dotted {border-style: dotted;}  
p.dashed {border-style: dashed;}  
p.solid {border-style: solid;}  
p.double {border-style: double;}  
p.groove {border-style: groove;}  
p.ridge {border-style: ridge;}  
p.inset {border-style: inset;}  
p.outset {border-style: outset;}  
p.none {border-style: none;}  
p.hidden {border-style: hidden;}  
p.mix {border-style: dotted dashed solid double;}

Border Width

The border-width property specifies the width of the four borders.

Example {  
    border-style: solid;  
    border-width: 5px;  
}

Border Color

The border-color property is used to set the color of the four borders.

The color can be set by:

name - specify a color name, like "red"

Hex - specify a hex value, like "#ff0000"

RGB - specify a RGB value, like "rgb(255,0,0)"

transparent

The border-color property can have from one to four values (for the top border, right border, bottom border, and the left border).

Example {  
    border-style: solid;  
    border-color: red;  
}

border-style property has four values:

**border-style: dotted solid double dashed;**

top border is dotted

right border is solid

bottom border is double

left border is dashed

If the border-style property has three values:

**border-style: dotted solid double;**

top border is dotted

right and left borders are solid

bottom border is double

If the border-style property has two values:

**border-style: dotted solid;**

top and bottom borders are dotted

right and left borders are solid

If the border-style property has one value:

**border-style: dotted;**

all four borders are dotted

The border-style property is used in the example above. However, it also works with border-width and border-color.

**Question # 4 Discuss Java Scripts with example . Advantages and limitations of Java Script . Write a program that shows my first Java Script pro gramand create a button that when we click the button it showS current date and time?**

Answer javascripts is a high-level, dynamic, untyped, and interpreted programming language. It has been standardized in the ECMAScript language specification. ... **JavaScript** is also used in environments that are not Web-based, such as PDF documents, site-specific browsers, and desktop widgets.

Example

<!DOCTYPE html>

<html><title> a</title>

<body>

<h1>What Can JavaScript Do?</h1>

<p id="demo">JavaScript can change HTML content.</p>

<button type="button" onclick="document.getElementById('demo').innerHTML = 'Hello JavaScript!'">Click Me!</button>

</body>

</html>

**Advantages**

**Javascript is executed on the client side**

This means that the code is executed on the user's processor instead of the web server thus saving bandwidth and strain on the web server.

**Javascript is a relatively easy language**

The Javascript language is relatively easy to learn and comprises of syntax that is close to English. It uses the DOM model that provides plenty of prewritten functionality to the various objects on pages making it a breeze to develop a script to solve a custom purpose.

**Javascript is relatively fast to the end user**  
As the code is executed on the user's computer, results and processing is completed almost instantly depending on the task (tasks in javascript on web pages are usually simple so as to prevent being a memory hog) as it does not need to be processed in the site's web server and sent back to the user consuming local as well as server bandwidth.

**Extended functionality to web pages**

Third party add-ons like Greasemonkey enable Javascript developers to write snippets of Javascript which can execute on desired web pages to extend its functionality. If you use a website and require a certain feature to be included, you can write it yourself and use an add-on like Greasemonkey to implement it on the web page.

**Limitations of JavaScript**

Client-side JavaScript does not allow the reading or writing of files. This has been kept for security reason.

JavaScript cannot be used for networking applications because there is no such support available.

JavaScript doesn't have any multithreading or multiprocessor capabilities

**Program**

<!DOCTYPEhtml>

<html>

<title> program</title>

<body>

<h1>java script program</h1>

<script>

functiondateShow(){

document.getElementById

('demo').innerHTML=Date();}

</script>

<buttontype="button"onclick="dateShow

()">Show Date</button>

<br/>

<b id="demo"></br>

</body>

</html>

**Question # 5 (1) Write a program that changes the text style by using java script.**

**(2) Write a program that add two numbers and by using (windows .alert) method in the script there sultans shown and when click “ok” it shows “My First web page” by using <h1> tag and in the next line it shows “This is my first calculation by using windows . alert ()method”.**

Answer

(1)

<!DOCTYPEhtml>

<html>

<title> program</title>

<body>

<h1>java script program</h1>

<script>

functionChangeStyle(){

document.getElementById

('nextText').style.font="italic40pxarial, sanserif";}

</script>

<buttontype="button"onclick="ChangeStyle()">Change style</button>

<br/>

<p id="nextText" style="font-size: 50px; font-family: monospace; color: pink"> this is last style</p>

</body>

</html>

(2)

<!DOCTYPEhtml>

<html>

<title> program</title>

<body>

<h1>java script program</h1>

<script>

varv1=prompt("enter 1st number");

varv2=prompt("enter 2nd number");

varsum=parseFloat(v1)+parseFloat(v2);

functionshowAlertsum(){

alert("sum of 1st and 2nd number =" +sum);

document.getElementByID('h1HEAding').innerText="1st page";

document.getElementByID('newText').innerText="calculation sum="+sum;

</script>

<buttontype="button"onclick="showAlertsum()">change style</button>

<br/>

<p id="newText"></p>

</body>

</html>