CSS3

1) CSS syntax

Ans)

CSS Syntax:

Selector Declaration Declaration

h1 {color : blue ; font-size : 12px;}

- A CSS rule has two main parts:
  1) A Selector
  2) One or more declarations
- The selector is normally the HTML element you want to style.
- Each declaration consists of a property and a value.
- The property is the style attribute you want to change. Each property has a value.
- A CSS declaration always ends with a semicolon, and declaration groups are surrounded by curly brackets:

```
p {color:red;text-align:center;}
```

- To make the CSS more readable, you can put one declaration on each line, like this:

```
p{
    color:red;
    text-align:center;
  }
```

2) How to put style : inline, embedded and external approach.

Ans)

Types of CSS:

• Inline: Style sheet definition only applies to the tag contents that contain it. It is used to control a single tag element. Each tag does not need to have its style defined as it inherits from its parent.

Eg: <h2 **style**="background: gold; font-family: Arial, Impact, Sans Serif; color:red">This is Level 2 Heading, with style</h2>

• Embedded: Embedded style sheets are placed within HTML code of the page they are to be applied to. Style sheet syntax comes between opening and closing <STYLE> tags. These tags are placed either in the <HEAD> section or between the </HEAD> and <BODY> tags.

```
Eg: <head>
        <style>
          body {background: black; color:green}
          h1 {background: orange; font-family: Arial; color:blue}
          h2, h3 {background: gold; font-family: Arial, Impact, Sans Serif}
        </style>
    </head>
```

• Linked: Linked style sheets exist as separate files that are linked to a page with the <LINK> tag. They have the css extension and are referenced with a URL. Inside the css file, style attributes are contained within opening and closing <STYLE> tags. Placing a single <LINK> tag within the <HEAD> tags links the page that needs these styles.

Eg: <head>
<title>Linked Style Sheet</title>
<link rel=stylesheet href="linked_ex2.css" type="text/css">
</head>

3) Different selector symbols: universal, id, class, attribute and pseudo class selectors.

Ans)

Universal Selector:

- The universal selector matches any element type.
- Example:
  This rule set will be applied to every element in a document:

```
*{
   margin : 0;
   padding : 0;
  }
```

Type Selectors:

- While the universal selector matches any element, an element type selector matches elements with the corresponding element type name.
- Type selectors are case insensitive in HTML (including XHTML served as text/html), but are case sensitive in XML (including XHTML served as XML).
- Example:

```
ul{
    : declarations
  }
```

- A type selector like the above ul matches all the elements within an HTML or XML document that are marked up as follows:
- …..

Class Selectors:

- Selecting elements on the basis of their class names is a very common technique in CSS
- While type selectors target every instance of an element, class selectors can be used to select any HTML element that has a class attribute, regardless of their position in the document tree.

- Example:

```
<head>
    <style>
        .big{font-size: 110%; font-weight: bold;}
    </style>
</head>
<body>
<p class=”big”>This is some<em>text</em></p>
    <p>This is some text</p>
    <ul>
    <li class=”big”>List item</li>
    <li>List item</li>
    <li>List<em>item</em></li></ul>
</body>
```

- Above code targets the first paragraph and first list items on a page to make them stand out

ID Selector:

- An ID Selector matches an element that has a specific id attribute value . Since id attributes must have unique values, an ID selector can never match more than one element in a document.
- In its simplest form, an ID selector looks like this:

```
#navigation
{
  : declarations
}
```

- This selector matches any element whose id attribute value is equal to “navigation”

```
#firstname
{
Background-color: yellow;
}
```

Attribute Selector:

- All HTML elements can have associated properties, called attributes. These attributes generally have values. Any number of attribute/value pairs can be used in an element’s tag-as long as they are separated by spaces. They may appear in any order.

- In the example below ,the code segments highlighted in blue are attributes and the segments highlighted in red are attribute values

```
<h1 id=”section1”/>
<img src=”small.gif” width=”100” height=”100”/>
<img title=”mainimage” alt=”main image”/>
<a href=”foo.htm”/>
<p class=”maintext”/>
<form style=”padding: 10px”/>
```

- Attribute selectors are used to select elements based on their attributes or attribute value. For example, you may want to select any image on an HTML page that is called “small.gif”. This could be done with the rule below, that will only target images with the chosen name:
- There are four types of attribute selectors.
- Example for select based on attribute

```
img[title]   {border: 1px solid #000;}
img[width] {border: 1px solid #000;}
```

(The example above will select an element (in this case “img”) with the relevant attribute)

- Example for select based on value

```
img[src=”small.gif”] {border: 1px solid #000;}
```

(The above example selects any image whose attribute(in this case “src”)has a value of “small.gif”)

Pseudo Classes:

- A pseudo-class is similar to a class in HTML, but it’s not specified explicitly in the markup.Some pseudo-classes are dynamic-they’re applied as a result of user interaction with the document.
- A pseudo-class starts with a colon(:). No whitespace may appear between a type selector or universal selector and the colon, nor can whitespace appear after the colon.

Pseudo class	**Description**
:link	matches link elements that are unvisited
:visited	matches link elements that have been visited
:active	matches any element that’s being activated by the user

4) How to put background image.

Ans)

Background Image: Specifies an image to use as the background of an element.

Ex: Body{ background-image : url(flower.pbg); }

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5) How to change the cases of text.

Ans)

The text-transform property is used to specify uppercase and lowercase letters in a text.

Example:

- p.uppercase { text-transform :uppercase;}
- p.lowercase{ text-transform :lowercase;}
- p.capitalize{ text-transform :capitalize;}

6) How to change opacity for colors.

Ans)

CSS Color:

- HSLA Color: HSLA color values are an extension of HSL color with an alpha channel-which specifies the opacity of the object.
- Ex: p{
  Background-color:hsla(120,65%,75%,0.3);
  }
- An HSLA color value is specified with: hsla(hue, saturation, lightness, alpha), where the alpha parameter defines the opacity. The alpha parameter is a number between 0.0 (fully transparent) and 1.0 (fully opaque).

7) Rounded corner border.

Ans)

Rounded Corners: In CSS3, creating rounded corners is easy. The border-radius property is used to create rounded corners:

- With CSS3, we can create rounded borders as shown below:

```
div{
    Border:2px solid;
    Border-radius:25px;
  }
```