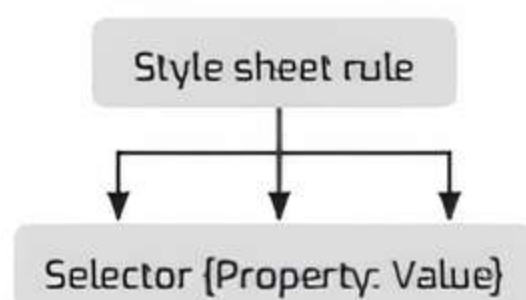# CSS (Cascading Style Sheets)

Fastrack REVISION

▶ **Cascading Style Sheet (CSS):** It is a style sheet language used for describing the look and formatting of a document written in markup language. It is a way to provide style to HTML.

▶ CSS can make the web pages more attractive, presentable and also help in saving time.

▶ CSS enables to separate the web pages with the formatting tags. CSS can be combined with HTML or XML to develop web pages.

▶ HTML pages contain HTML tags and different styles can be specified for these tags using CSS. A single CSS file can be linked to many web pages.

▶ **Advantages of CSS:**
  ➤ CSS saves time to develop web pages.
  ➤ CSS uses less bandwidth.
  ➤ CSS makes downloading web pages/websites faster.
  ➤ CSS is easy to maintain.
  ➤ CSS is easy to use with HTML.
  ➤ CSS has a wider variety of tags.
  ➤ CSS provides superior styles to HTML.
  ➤ CSS supports all web standards and browsers.

▶ **Disadvantages of CSS:**
  ➤ CSS has different syntax from HTML.
  ➤ CSS behaves differently with different browsers.
  ➤ Downloading CSS files take more time.
  ➤ CSS shows vulnerability.

▶ **CSS syntax** is basically a set of rules that direct web browsers to interpret HTML tags in a specific manner.

▶ CSS styles are first interpreted by the web browsers and then applied to the content contained in the web pages.

▶ CSS rules are made up of the following three major parts:

Style sheet rule

Selector {Property: Value}

▶ **Selector:** A selector is an HTML tag to which a style will be applied. This could be any HTML tag such as <TABLE>, <P>, <BODY>, etc.

▶ **Property:** A property is a type of attribute of HTML tag. All the attributes of all the HTML tags are converted into CSS properties. They could be COLOR, BORDER, etc.

▶ **Value:** Values are given to properties, for example, color property can have value yellow, and border can have 4 and so on.

▶ **Types of Style Sheets:** Style Sheets can be linked in different ways to HTML pages.
  ➤ **Internal or Embedded Style Sheet:** The internal or embedded style sheet is the one that we define in the same HTML page in which we want to use the styles. The internal style sheet is used when we want to define the styles for a single web page. In the case of this style sheet, the style rules are mentioned in the header section of the HTML page. The <STYLE></STYLE> tags are used to define the styles and contain the styles.
  ➤ **External Style Sheet:** Instead of defining the style rules in the same HTML page, we can even define all the style rules in a separate style file and can link this file to web page(s). This external style sheet will be saved as a separate text style sheet file with the extension .CSS. We can define all the style rules in this style sheet file, and link this to any HTML document. The <LINK> tag is used to link an external .CSS file into an HTML page.
  ➤ **Inline Style Sheet:** We can even define a style rule for a single tag in the HTML page itself. This is known as defining an inline style. This is used to apply a unique style to a single tag. To define an inline style, the STYLE attribute is inserted in the specific tag for which we want to define the style. The STYLE attribute can contain any CSS property and value.

▶ **Precedence of Style Sheets:** Multiple style sheets can even be linked or applied on to a single web page. For example, we can link an external style sheet to an HTML page that has inline style also. In the case when multiple style sheets are applied to the same HTML page, the style sheet actually applied is decided on the priority basis.

▶ **The following is the precedence order of the style sheets:**
  ➤ **Internal Style Sheet:** The internal style sheet has the highest priority. So, it will override any rule defined in the <STYLE>...</STYLE> tags or rules defined in any external style sheet file.
  ➤ **Inline Style Sheet:** After the internal style sheet, second priority is of inline style sheet. Any rule defined in the <STYLE>...</STYLE> tags will override the rules defined in any external style sheet file.

- ➤ **External Style Sheet:** The external style sheet has the least priority. Any rule defined in an external style sheet file takes the lowest priority, and rules defined in this file will be applied only when the above two rules are not applicable.
- ▶ **Specifying Colour in CSS:** The colour values are used to apply colours to different elements in CSS. These are used to set a colour either for the foreground of an element (*i.e.*, its text) or else for the background of the element. The colour values can also be used to specify the colour for borders, etc.
- ▶ These values can be given using the name of the colour such as pink, red, yellow, blue, etc. These can even be specified by giving the hexadecimal codes, RGB values or short hexadecimal codes.
- ▶ **Background-color Property:** It is used to specify the background colour of an HTML tag. It can be used with any HTML element to specify its background colour.
- ▶ **Border Properties:** The border properties are used to specify the border style, border colour, border width, etc. Different border style properties are as follows:
    - ➤ **Border-color:** This property specifies the colour of border.
    - ➤ **Border-style:** This property specifies whether a border should be solid, dashed line, double line or one of the other possible values.
    - ➤ **Border-width:** This property specifies the width of a border.
- ▶ **Border-style Property:** The border-style property specifies the kind of border to be displayed around the element. Different values that can be specified with this property are as follows:
    - ➤ **Dotted:** It applies a dotted border.
    - ➤ **Dashed:** It applies a dashed border.
    - ➤ **Solid:** It applies a solid border.
    - ➤ **Double:** It applies a double border.
    - ➤ **Groove:** It applies a border that looks as though it is carved into the page ridge.
    - ➤ **Inset:** It applies a border that makes the box look as if it is embedded in the page.
    - ➤ **Outset:** It applies a border that makes the box look as if it is coming out of the canvas.
    - ➤ **None:** It applies no border.
    - ➤ **Hidden:** It applies a hidden border.
- ▶ **Margin Property:** The margin property specifies the space around elements. The different values that can be specified with the margin property are as follows:
    - ➤ **Margin:** It specifies a shorthand property for setting the margin properties in one declaration.
    - ➤ **Margin-bottom:** It specifies the bottom margin of an element.
    - ➤ **Margin-top:** It specifies the top margin of an element.
- ➤ **Margin-left:** It specifies the left margin of an element.
- ➤ **Margin-right:** It specifies the right margin of an element.
- ▶ **Outline Property:** The outline property specifies a line to be drawn around elements. The line is drawn outside the borders to make the element 'stand out' and to enhance its impact. Different types of outline properties such as outline-style, outline-color and outline-width can be specified for an HTML tag.
- ▶ **Outline-style Property:** The outline-style property specifies the style of the outline. It can have one of the following values:
    - ➤ **Dotted:** It applies a dotted outline.
    - ➤ **Dashed:** It applies a dashed outline.
    - ➤ **Solid:** It applies a solid outline.
    - ➤ **Double:** It applies a double outline.
    - ➤ **Groove:** It applies an outline that looks as though it is carved into the page ridge.
    - ➤ **Inset:** It applies an outline that makes the box look like as if it is embedded in the page.
    - ➤ **Outset:** It applies an outline that makes the box look like as if it is coming out of the canvas.
    - ➤ **None:** It applies no outline.
    - ➤ **Hidden:** It applies a hidden outline.
- ▶ **Outline-color Property:** This property is used to specify the colour of the outline.
- ▶ **Outline-width Property:** This property is used to specify the width of the outline.
- ▶ **Font Property:** It is used to format the text appearing in web pages as they specify the font type, size and colour for an HTML tag.
    - ➤ **Font-family Property:** It specifies the face of a font.
    - ➤ **Font-style Property:** It makes a font italic or oblique.
    - ➤ **Font-size Property:** It either increases or decreases the size of a font.
- ▶ **Align Property:** This property is used to specify the alignment position *i.e.*, left, right and center of an HTML tag.
- ▶ **Float Property:** The float property specifies the position or alignment of the content around each other when these are put inside another container. For example, how the text should be placed around an image when the image is put up inside a box. The float property can have one of the following values:
    - ➤ **Left:** The element floats to the left of its container.
    - ➤ **Right:** The element floats to the right of its container.
    - ➤ **None:** The element does not float (will be displayed just where it occurs in the text). This is default.
    - ➤ **Inherit:** The element inherits the float value of its parent.

Practice *Exercise*

? Multiple
Choice Questions

Q 1. Which of the following is the correct full form of CSS?

a. Cascading Single Sheet

b. Cascading Style Sheets

c. Cascade Single Sheet

d. Cascade Style Sheet

Q 2. DHTML is a combination of .... and ....

a. DOM and CSS

b. CSS and Conventional HTML

c. HTML and JavaScript

d. None of the above

Q 3. .... is a style sheet language used for describing the look and formatting of a document written in a markup language.

a. Document Object Model (DOM)

b. Multimedia filters

c. Cascading Style Sheets (CSS)

d. DHTML

Q 4. Which of the following property specifies the width of a border?

a. Border-color   b. Border-style

c. Border-width   d. None of these

Q 5. Which of the following property specifies the right margin of an element?

a. Margin-right   b. Margin-bottom

c. Margin-top   d. Margin-left

Q 6. Which of the following property is used to set the width of the outline?

a. Outline-style   b. Outline-color

c. Outline-width   d. None of these

Q 7. Which of the following property is used to change the face of a font?

a. Font-style   b. Font-family

c. Font-size   d. Font-color

Q 8. Which property describes how bold or heavy a font should be presented?

a. Font-style   b. Font-size

c. Font-weight   d. Font-variant

Q 9. The units .... and .... allow the user to adjust the font size according to him/her.

a. '#', 'me'   b. '96', 'em'

c. 'S', 'es'   d. All of these

Q 10. The units px and .... make the font size absolute.

a. 'pr'   b. 'pn'

c. 'pz'   d. 'pt'

Q 11. The .... repeats the image both horizontally and vertically to cover the entire screen.

a. background-image property

b. foreground-color property

c. background-color property

d. background-repeat property

Q 12. The .... makes it possible to add different "decorations" or "effects" to text.

a. text-align property

b. text-indent property

c. letter-spacing property

d. None of the above

Q 13. Which property is used to give the specified spacing between the text characters?

a. Text Decoration   b. Letter Spacing

c. Text Transform   d. None of these

Q 14. Which of the following is the correct syntax for referring the external style sheet?

a. <style src = example.css>

b. <style src = "example.css" >

c. <stylesheet> example.css </stylesheet>

d. <link rel="stylesheet" type="text/css" href = "example.css">

Q 15. The property in CSS used to change the background color of an element is:

a. bgcolor   b. color

c. background-color   d. All of these

Q 16. The property in CSS used to change the text color of an element is:

a. bgcolor   b. color

c. background-color   d. All of these

Q 17. The CSS property used to control the element's font-size is:

a. text-style   b. text-size

c. font-size   d. None of these

Q 18. The HTML attribute used to define the inline styles is:

a. style   b. styles

c. class   d. None of these

Q 19. The HTML attribute used to define the internal stylesheet is:

a. <style>   b. style

c. <link>   d. <script>

Q 20. Which of the following CSS property is used to set the background image of an element?

a. Background-attachment

b. Background-image

c. Background-color

d. None of the above

Q 21. Which of the following is the correct syntax to make the background-color of all paragraph elements to yellow?

a. p {background-color : yellow;}

b. p {background-color : #yellow;}

c. all {background-color : yellow;}

d. all p {background-color : #yellow;}

Q 22. Which of the following is the correct syntax to display the hyperlinks without any underline?

a. a {text-decoration : underline;}

b. a {decoration : no-underline;}

c. a {text-decoration : none;}

d. None of the above

Q 23. Which of the following property is used as the shorthand property for the padding properties?

a. Padding-left   b. Padding-right

c. Padding   d. All of these

Q 24. The CSS property used to make the text bold is:

a. font-weight : bold   b. weight: bold

c. font: bold   d. style: bold

Q 25. Are the negative values allowed in padding property?

a. Yes   b. No

c. Can't say   d. May be

Q 26. Which of the following property is used as the shorthand property of margin properties?

a. Margin-left   b. Margin-right

c. Margin   d. None of these

Q 27. The CSS property used to specify the transparency of an element is:

a. opacity   b. filter

c. visibility   d. overlay

Q 28. Which of the following is used to specify the subscript of text using CSS?

a. vertical-align: sub

b. vertical-align: super

c. vertical-align: subscript

d. None of the above

Q 29. Which of the following CSS property is used to specify the space between every letter inside an element?

a. Alpha-spacing   b. Character-spacing

c. Letter-spacing   d. Alphabet-spacing

Q 30. The CSS property used to specify whether the text is written in the horizontal or vertical direction?

a. Writing-mode   b. Text-Indent

c. Word-break   d. None of these

Q 31. Which of the following syntax is correct in CSS to make each word of a sentence start with a capital letter?

a. text-style : capital;

b. transform : capitalise;

c. text-transform : capital;

d. text-transform : capitalise;

Q 32. How to select the elements with the class name "example"?

a. example   b. #example

c. .example   d. Class example

Q 33. Which of the following is the correct syntax to select all paragraph elements in a div element?

a. div p   b. p

c. div#p   d. div ⁻ p

Q 34. Which of the following is the correct syntax to select the p siblings of a div element?

a. p   b. div + p

c. div p   d. div ⁻ p

Q 35. The CSS property used to draw a line around the elements outside the border?

a. Border   b. Outline

c. Padding   d. Line

Q 36. Which of the following CSS property is used to add shadows to the text?

a. Text-shadow   b. Text-stroke

c. Text-overflow   d. Text-decoration

Q 37. Which of the following is not a value of the font-variant property in CSS?

a. Normal   b. Small-caps

c. Large-caps   d. Inherit

Q 38. Which of the following CSS property is used to specify whether the table cells share the common or separate border?

a. Border-collapse   b. Border-radius

c. Border-spacing   d. None of these

Q 39. The CSS property used to make the rounded borders or rounded corners around an element is:

a. border-collapse   b. border-radius

c. border-spacing   d. None of these

Q 40. The CSS property used to set the distance between the borders of the adjacent cells in the table is:

a. border-collapse   b. border-radius

c. border-spacing   d. None of these

Q 41. Which of the following selector in CSS is used to select the elements that do not match the selectors?

a. :! selector   b. :not selector

c. :empty selector   d. None of these

Q 42. Which of the following is not a type of combinator?

a. >   b. ⁻

c. +   d. •

Q 43. Which of the following CSS property defines how an image or video fits into container with established height and width?

a. Object-fit   b. Object-position

c. Position   d. None of these

Q 44. Which type of CSS is used in the below code?

`<p style = "border:2px solid red;">`:

    a. Inline CSS   b. Internal CSS

    c. External CSS   d. None of these

Q 45. Which of the following CSS property specifies the origin of the background-image?

    a. Background-origin   b. Background-attachment

    c. Background-size   d. None of these

Q 46. The CSS property used to set the maximum width of the element's content box is:

    a. max-width property   b. height property

    c. max-height property   d. position property

Q 47. Which of the following CSS function allows us to perform calculations?

    a. calc() function   b. calculator() function

    c. calculate() function   d. cal() function

Q 48. The CSS property used to set the maximum height of the element's content box is:

    a. max-width property   b. height property

    c. max-height property   d. position property

Q 49. The CSS property used to set the minimum width of the element's content box is:

    a. max-width property   b. min-width property

    c. width property   d. All of these

Q 50. Which of the following CSS property is used to represent the overflowed text which is not visible to the user?

    a. Text-shadow   b. Text-stroke

    c. Text-overflow   d. Text-decoration

Q 51. The CSS property which is used to define the set the difference between two lines of your content is:

    a. min-height property   b. max-height property

    c. line-height property   d. None of these

Q 52. Which of the following CSS property is used to add stroke to the text?

    a. Text-stroke property

    b. Text-transform property

    c. Text-decoration property

    d. None of the above

? Fill in the Blanks
Type Questions

Q 53. CSS uses a numeric scale of multiples of .... to ....

Q 54. The CSS specification also allows browser to render any .... value as normal.

Q 55. A property is a type of .... of the HTML tag.

Q 56. The external style sheet is saved with the extension ....

Q 57. .... measurement unit defines a measurement in inches.

Q 58. The .... specifies the width of a border.

Q 59. .... property specifies the bottom margin of an element.

Q 60. The font-variant property refers to the .... variant of the font face.

? Assertion and Reason
Type Questions

Directions (Q. Nos. 61-69): *In the questions given below, there are two statements marked as Assertion (A) and Reason (R). Read the statements and choose the correct option.*

    a. Both (A) and (R) are true and (R) is the correct explanation of (A).

    b. Both (A) and (R) are true, but (R) is not correct explanation of (A).

    c. (A) is true, but (R) is false.

    d. (A) is false, but (R) is true.

Q 61. Assertion (A): Using CSS saves a lot of time while developing web pages.

Reason (R): The same style sheet can be linked to more than one web page and all web pages will share and have the same effects.

Q 62. Assertion (A): HTML and CSS are not really different from each other, rather CSS is an extension of HTML.

Reason (R): HTML pages contain HTML tags and different styles can be specified for these tags using CSS.

Q 63. Assertion (A): If we have learnt all the HTML tags in detail, we still need to learn CSS coding in case we wish to use CSS with HTML.

Reason (R): CSS syntax and styles are different from HTML.

Q 64. Assertion (A): CSS syntax is basically a set of rules that direct web browsers to interpret HTML tags in a specific manner.

Reason (R): A property is an HTML tag to which a style will be applied. This could be any HMTL tag such as `<tabel>`, `<p>`, `<body>`, etc.

Q 65. Assertion (A): Multiple properties and the value pairs are separated by a semicolon (;).

Reason (R): BORDERCOLOUR attribute enables you to specify the background colour of a table.

Q 66. Assertion (A): The external style sheet is the one that we define in the same HTML page in which we want to use the styles.

Reason (R): The styles can even be defined in the HTML code along with the code for which we want to define styles. Such style sheets are known as inline style sheets.

Q 67. Assertion (A): The <style> tag has one main attribute that is type. It has the value "text/css".
Reason (R): The <link> tag is used to link an external css file into an HTML page.

Q 68. Assertion (A): The external style sheet has the lest priority. Any rule defined in an external style sheet file takes the lowest priority, and rules defined in this file will be applied only when the above two rules are not applicable.
Reason (R): The color values are used to apply colours to different elements in CSS. These are used to set a color either for the foreground of an element (*i.e.*, its text) or else for the background of the element.

Q 69. Assertion (A): Different style elements can be used to define styles for different HTML tags.
Reason (R): The border-color property is used to specify the background colour of an HTML tag. It can be used with any HTML element to specify its background colour.

Answers

1. (b) Cascading Style Sheets
2. (c) HTML and JavaScript
3. (c) Cascading Style Sheets (CSS)
4. (c) Border-width
5. (a) Margin-right
6. (c) Outline-width
7. (b) Font-family
8. (c) Font-weight
9. (b) '%', 'em'
10. (d) 'pt'
11. (d) background-repeat property
12. (d) None of the above
13. (b) Letter Spacing
14. (d) <link rel="stylesheet" type="text/css" href = "example.css">
15. (c) background-color
16. (b) color
17. (c) font-size
18. (a) style
19. (a) <style>
20. (b) Background-image
21. (a) p {background-color : yellow;}
22. (c) a {text-decoration : none;}
23. (c) Padding
24. (a) font-weight : bold
25. (b) No
26. (c) Margin
27. (a) opacity
28. (a) vertical-align: sub
29. (c) Letter-spacing
30. (a) Writing-mode
31. (d) text-transform : capitalise:
32. (c) .example
33. (a) div p
34. (d) div ¯ p
35. (b) Outline
36. (a) Text-shadow
37. (c) Large-caps
38. (a) Border-collapse
39. (b) border-radius
40. (c) border-spacing
41. (b) :not selector
42. (d) *
43. (a) Object-fit
44. (a) Inline CSS
45. (a) Background-origin
46. (a) max-width property
47. (a) calc() function
48. (c) max-height property
49. (b) min-width property
50. (c) Text-overflow
51. (c) line-height property
52. (a) Text-stroke property
53. 100 to 900
54. default
55. attribute
56. .css
57. In
58. border-width
59. bottom-margin
60. letter case
61. (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
62. (b) Both (A) and (R) are true, but (R) is not correct explanation of (A).
63. (a) Both (A) and (R) are true and (R) is the correct explanation of (A).
64. (c) (A) is true, but (R) is false.
65. (c) (A) is true, but (R) is false.
66. (d) (A) is false, but (R) is true.
67. (b) Both (A) and (R) are true, but (R) is not correct explanation of (A).
68. (b) Both (A) and (R) are true, but (R) is not correct explanation of (A).
69. (c) (A) is true, but (R) is false.

[?] Case Study Based
√Questions

Case Study 1

Read the given passage carefully and answer the following questions:

CSS: It is a style sheet language used for describing the presentation of a document written in a markup language. CSS is designed primarily to enable the separation of document content from document presentation, including aspects such as the layout, colour and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple HTML pages to share formatting

by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content such as semantically insignificant tables that were widely used to format pages before consistent CSS rendering was available in all major browsers. CSS makes it possible to separate presentation instruction from the HTML content in a separate file or style section of the HTML file. For each matching HTML element, it provides a list of formatting instructions.

Q 1. The full form of CSS is:
a. Cascading Style Sheet
b. Cascading Sheet Style
c. Cascade Style Sheet
d. Cascadation Style Sheet

Q 2. CSS rule set consists of:
a. selector   b. declaration
c. Both a. and b.   d. None of these

Q 3. The full form of HTML is:
a. HyperTransfer Markup Language
b. HyperText Markup Language
c. HyperText Makeup Language
d. HyperTransmission Markup Language

Q 4. .... points to the HTML element that you want to style.
a. Selector   b. Declaration
c. ID   d. None of these

Q 5. A CSS declaration always ends with a:
a. dot   b. colon
c. semicolon   d. hash

Q 6. CSS declaration blocks are surrounded by:
a. small braces
b. curly braces
c. big braces
d. angular braces

Q 7. Which of the following is/are property value of CSS?
a. Colour   b. Margin
c. Height   d. All of these

Answers
---

1. (a) Cascading Style Sheet
2. (c) Both a. and b.
3. (b) HyperText Markup Language
4. (a) Selector
5. (c) semicolon
6. (b) curly braces
7. (d) All of these

Case Study 2

Read the given passage carefully and answer the following questions:

Working with Style Sheets Elements Properties: Different style elements can be used to define styles for different HTML tags. These style elements have different property values and can be used in any of the style sheet types. Let us learn about these different style elements used for defining different style rules.

Background-color Property: The background-color property is used to specify the background colour of an HTML tag. It can be used with any HTML element to specify its background colour.

Margin Property: The margin property specifies the space around elements.

Outline Property: The outline property specifies a line to be drawn around elements. The line is drawn outside the borders to make the element 'stand out' and to enhance its impact.

Q 1 The .... property specifies the kind of border to be displayed around the element.
a. border-style   b. border-color
c. border-width   d. None of these

Q 2. The .... property is used to specify the background colour of an HTML tag.
a. border-style   b. border-color
c. border-width   d. background-color

Q 3. The .... property applies a border that looks as though it is carved into the page ridge.
a. inset   b. outset   c. groove   d. hidden

Q 4. The .... property specifies the space around elements.
a. border   b. margin
c. background   d. None of these

Q 5. The .... property specifies that the margin should be inherited from the parent element.
a. auto   b. %
c. inherit   d. length

Q 6. The .... property specifies a line to be drawn around elements.
a. outline   b. inline
c. border   d. None of these

Q 7. The .... property is used to specify the colour of the outline.
a. outline-width   b. outline-color
c. font property   d. None of these

1. (a) border-style
2. (d) background-color
3. (b) outset
4. (b) margin
5. (c) inherit
6. (a) outline
7. (b) outline-color

Case Study 3

Read the given passage carefully and answer the following questions:

Outline Property: The outline property specifies a line to be drawn around elements. The line is drawn outside the borders to make the element 'stand out' and to enhance its impact. Different types of outline properties such as outline-style, outline-colour, outline-width can be specified for an HTML tag.

Q 1. Which property applies an outline that makes the box look like it is embedded in the page?

Q 2. Why the Outlines are different from the borders?

Q 3. Which property applies an outline that makes the box look like it is coming out of the canvas?

Q 4. What are the different types of outline properties which can be specified for an HTML tag?

Q 5. The outline-color property is used to specify the colour of the outline. How can this colour be specified?

Q 6. The outline-width property is used to specify the width of the outline. What are the units or its fixed size?

Q 7. The outline-width property is used to specify the width of the outline. What valus can it have?

1. Inset property.
2. The outlines are different from the borders because of the following reasons:
   (i) An outline does not take up space.
   (ii) The outlines do not have to be rectangular.
   (iii) The outline is always the same on all sides.
3. Outset property.
4. The different types of outline properties which can be specified for an HTML tag are as follows:
   (i) Outline-style
   (ii) Outline-color
   (iii) Outline-width
5. Colour name, hexadecimal code or RGB value.
6. This units are px, pt or cm.
7. It can be thin (typically 1px), medium (typically 3px) or thick (typically 5px).

? Very Short Answer
Type Questions

Q 1. What are cascading style sheets?

Ans. Cascading style sheet is a list of statements that can assign various rendering properties or style to HTML elements.

Q 2. Name the different types of style sheets.

Ans. The different types of style sheets are: Inline style sheet, Internal style sheet and External style sheet.

Q 3. Explain how would you apply style in your HTML page?

Ans. There are three ways to apply style to an HTML document. By Inline, Internal or using External style sheet in HTML page.

Q 4. What is the extension of CSS file?

Ans. Extension of CSS file is .css.

Q 5. Discuss the purpose of following shortcut keys while working with web browsers.
   (i) Ctrl + N
   (ii) Alt + Home

Ans. (i) To open a new browser window.
   (ii) To open home page.

Q 6. What is the use of the margin property?

Ans. The margin property specifies the space around the elements.

Q 7. State the difference between the inset and outset outline style.

Ans. Inset Outline Style: It applies an outline and makes the box look like as if it is embedded in the page.
Outset Outline style: It applies an outline and makes the box look like as if it is coming out of the canvas.

Q 8. Which element property is used to set the size of the text?

Ans. The font-size property is used to set the size of the text.

? Short Answer
Type-I Questions

Q 1. What is the use of CSS in HTML?

Ans. HTML is not the only technology using which we can create web pages. There are other technologies or languages also, using which we can enhance the web pages. We can even increase the productivity of the web pages designed using HTML along with these technologies. CSS (Cascading Style Sheets) is one such technology that enhances the productivity and efficiency of the HTML documents.

Q 2. How can you define different style rules for multiple tags?

Ans. We can apply multiple formatting effects on to an HTML tag. We may do so by defining multiple style rules for a single element. Multiple properties or attributes can be combined and defined for a single tag.

Q 3. Explain the attributes of the <LINK> tag in detail.

Ans. The following are the different attributes of the <LINK> tag.

    (i) TYPE attribute of the <LINK> tag: The <LINK> tag has one attribute that is TYPE attribute. It has the value 'text/css'. The value specifies the style sheet language as a content-type. For example, <LINK TYPE = 'text/css'>

    (ii) HREF attribute of the <LINK> tag: Another attribute of the <LINK> tag is the HREF attribute. It specifies the style sheet file containing the style rules. It accepts the URL of the .css file to be linked as the value.

Q 4. How are outlines different from borders?

Ans. The **outline** property specifies a line to be drawn around elements. The line is drawn outside the borders to make the element 'stand out' and to enhance its impact while, the **border** properties are used to specify the border style, border colour, border width, etc.

Q 5. How many types of text alignment can be included in a CSS page? How can you capitalise the text in a web page?

Ans. Three types of text alignment can be included in a CSS page:

    (i) Left, right or center of the screen.
    (ii) The text can be capitalised using text-transform property in a web page.

Q 6. Write any two Differences between the outline and border-style properties of CCS

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Ans. Differences between the outline and border-style properties of CCS are:

    (i) Outlines do not take up space, because they are always placed on top of the box of the element which may cause them to overlap other elements on the page.
    (ii) Unlike border-style, outlines won't allow us to set each edge to a different width, or set different colors and styles for each edge. The outline is the same on all sides.
    (iii) Outlines do not have any impact on surrounding elements apart from overlapping.
    (iv) Unlike border-style, outlines do not change the size or position of the element.
    (v) The CSS border properties allow you to specify the style and color of an elements border. An outline is a line that is drawn around elements (outside the borders) to make the elements.

Q 1. Compare HTML and CSS.

Ans. HTML and CSS are not really different from each other, rather CSS is an extension of HTML. CSS enhances basic HTML tags and attributes and improves the presentation of the web pages. HTML pages contain HTML tags and different styles can be specified for these tags using CSS. A single CSS file can be linked to many web pages. All web pages will import the styles of the style sheet. Thus, we can say that HTML contains basic tags to create web pages, whereas CSS is an extension to HTML as it only specifies the formatting and appearance styles for these web pages.

Q 2. Discuss a few advantages of CSS.

Ans. The advantages of CSS are as follows:

    (i) CSS Saves Time to Develop Web Pages: CSS allows us to specify the formatting styles for different HTML tags only once. These styles will be applied to all the tags of a single web page or same style sheets can even be linked to several web pages. Thus, CSS helps in saving a lot of time as the web developers do not need to write the same formatting code again and again. They can make a style sheet once and can link it to as many web pages as they want.

    (ii) CSS Uses Less Bandwidth: CSS makes HTML web pages lighter as styles are mentioned in separate files, and one file can be linked to many web pages. Thus, CSS helps in reducing the bandwidth usage.

    (iii) CSS Makes Downloading the Web Pages/ Websites Faster: Since, CSS result in specifying or writing the smaller code for HTML pages, so lighter web pages/websites download faster than the heavier ones.

Q 3. Discuss the disadvantages of CSS.

Ans. The disadvantages of CSS are as follows:

    (i) CSS has Different Syntax from HTML: CSS syntax and styles are different from HTML So, even if we have learnt all the HTML tags in detail, we still need to learn CSS coding in case we wish to use CSS with HTML.

    (ii) CSS Behaves Differently with Different Browsers: Although CSS is compatible with almost every browser, web pages/websites developed using CSS may not appear same while viewing in different browsers. CSS web pages appear different in different browsers.

(iii) Vulnerability: CSS files can be externally linked to all the web pages of a website. All web pages will import the formatting styles. But, in case if a CSS file is misplaced or gets damaged, none of the web pages will reflect the formatting applied using that CSS.

Q 4. Discuss the inline style sheets in detail.

Ans. Inline Style Sheet: We can even define a style rule for a single tag in the HTML page itself. This is known as defining an inline style. This is used to apply a unique style to a single tag. To define an inline style, the STYLE attribute is inserted in the specific tag for which we want to define the style. The style attribute can contain any CSS property and value.

Syntax of inline style sheet into an HTML page:

<TAG STYLE = "...style rules...">

Q 5. Briefly explain the precedence order of style sheets.

Ans. The precedence order of style sheets are as follows:

(i) Internal Style Sheet: The internal style sheet has the highest priority. So, it will override any rule defined in the <STYLE>... </STYLE> tags or the rules defined in any external style sheet file.

(ii) Inline Style Sheet: After the internal style sheet, the second priority is given to the inline style sheet. Any rule defined in the <STYLE>...</STYLE> tags will override rules defined in any external style sheet file.

(iii) External Style Sheet: The external style sheet has the least priority. Any rule defined in an external style sheet file takes the lowest priority, and rules defined in this file will be applied only when the above two rules are not applicable.

Q 6. State the difference between the internal and external style sheet with the help of their syntax.

Ans. Internal or Embedded Style Sheet: The internal or embedded style sheet is the one that we define in the same HTML page in which we want to use the styles. The internal style sheet is used when we want to define the styles for a single web page. In the case of this style sheet, the style rules are mentioned in the header section of the HTML page. The <STYLE></STYLE> tags are used to define the styles and contain the styles.

Syntax of the Internal Style Sheet:

```
<HTML>
<HEAD >
<TITLE> .....</TITLE>
<STYLE TYPE = "text/css">
{
Style rules......
...................
.....................
```

```
}
</HEAD >
<BODY>
HTML tags and content
</BODY>
</HTML>
```

External Style Sheet: Instead of defining the style rules in the same HTML page. We can even define all the style rules in a separate style file and can link this file to web page(s). This external style sheet will be saved as a separate text style sheet file with the extension .css. We can define all the style rules in this style sheet file, and link this to any HTML document. The <LINK> tag is used to link an external .css file into an HTML page.

Syntax of the External Style Sheet:

```
<HTML>
<HEAD >
<TITLE> .....</TITLE>
<LINK TYPE = "text/css" HREF = "filename">
```

The <LINK> tag includes an external .css file in an HTML page. One common CSS file can be linked to different web pages using the same syntax.

👍 **TIP**

Write the syntax of both types of style sheets to show the difference between the two.

Q 7. Discuss different border properties.

Ans. The border properties are used to specify the border-style, border-color, border-width, etc. Different border-style properties are as follows:

(i) Border-color: This property specifies the colour of a border.

(ii) Border-style: This property specifies whether a border should be solid, dashed line, double line or one of the other possible values.

(iii) Border-width: This property specifies the width of a border.

Q 8. Form a CSS code within the <HEAD>....</HEAD> for the following specifications:
(i) Background colour: blue.
(ii) For the paragraph, font family is Dotum and colour of the text is red.
(iii) Heading should be in black colour.

Ans.
```
<HEAD>
<STYLE>
BODY {background-color: blue;}
P {color:red;
font-family:Dotum;
}
H1{color: black}
</STYLE>
</HEAD>
```

Q 9. BODY {background-image: url("learn.gif");
background-repeat: repeat-x}

In reference with the above CSS code, explain the usage of background-repeat property. Also mention the different values that can be used for background repeat.

Ans. With reference to the given CSS code, the inserted background image learn.gif will repeat horizontally on the browser screen.

The four different values for background repeat are as follows:

S.No.	Value	Description
(i)	Background repeat repeat-x	The image is repeated horizontally.
(ii)	Background repeat repeat-y	The image is repeated vertically.
(iii)	Background repeat repeat	The image is repeated both horizontally and vertically.
(iv)	Background repeat no-repeat	The image is not repeated.

Q 10. Write an HTML code of a web page using CSS.

Ans.

```
File  Edit  Format  View  Help
<HTML>
<HEAD>
<TITLE>Example Web Page</TITLE>
<STYLE>
H1 {
  FONT-FAMILY: comic sans ms, cursive, serif;
  COLOR: red;
  BORDER-BOTTOM: 1px dotted dark green;
  }
P {
  FONT-FAMILY: sans-serif; COLOR: orange;
  }
</STYLE>
</HEAD>
<BODY>
<H1>HTML Document using CSS</H1>
<P>This is a basic HTML document. This uses CSS.</P>
</BODY>
</HTML>
```

OUTPUT

? Long Answer
Type Questions

Q 1. Answer the following questions:
   (i) What do you understand by FONT property?
   (ii) What do you understand by FLOAT property?
   (iii) What is the use of ALIGN property in CSS?

Ans. (i) The font properties are mainly used to format the text appearing in web pages as these properties specify the font type, size and colour for an HTML tag. The different font properties that can be specified for an element are as follows:

The **font-family property** specifies the face of a font. It can accept any font family name as value.

The **font-style property** makes a font italic or oblique. The style can be specified in terms of normal, italic and oblique.

The **font-size property** either increases or decreases the size of a font. The size can be specified in terms of xx-small, x-small, small, medium, large, x-large, xx-large, smaller and larger in pixels or in %.

   (ii) The float property specifies the position or alignment of the content around each other when these are put inside another container. For example, how the text should be placed around an image when the image is put up inside a box. The float property can have one of the following values:

   (a) Left: The element floats to the left of its container.

   (b) Right: The element floats to the right of its container.

   (c) None: The element does not float (will be displayed just where it occurs in the text). This is default.

   (d) Inherit: The element inherits the float value of its parent.

   (iii) The Align property is used to specify the alignment position, i.e., left, right and center of an HTML tag. It can be used to specify the alignment of text, images, etc.

Q 2. Answer the following questions:
  (i) Explain outline-style property with its values.
  (ii) What do you understand by outline-color property?
  (iii) What do you understand by outline-width property?

Ans. (i) Outline-style Property: The outline-style property specifies the style of the outline. **It can have one of** the following **values:**
  (a) **Dotted:** It applies a dotted outline.
  (b) **Dashed:** It applies a dashed outline.
  (c) **Solid:** It applies a solid outline.
  (d) **Double:** It applies a double outline.
  (e) **Groove:** It applies an outline that looks as though it is carved into the page ridge.
  (f) **Inset:** It applies an outline that makes the box look like as if it is embedded in the page.
  (g) **Outset:** It applies an outline that makes the box look like as if it is coming out of the canvas.
  (h) **None:** It applies no outline.
  (i) **Hidden:** It applies a hidden outline.

(ii) Outline-color Property: The outline-color property is used to specify the colour of the outline. The colour can be specified by giving a colour name, hexadecimal code, RGB value, etc.

(iii) Outline-width Property: The outline-width property is used to specify the width of the outline. It can have one of the values such as thin (typically 1px), medium (typically 3px), thick (typically 5px) or a fixed size given in px, pt, cm, em, etc.

Q 3. Explain border-style property with an HTML code example.

Ans. Border-style property: The border-style property specifies the kind of border to be displayed around the element. Different values that can be specified with this property are as follows:
  (a) **Dotted:** It applies a dotted border.
  (b) **Dashed:** It applies a dashed border.
  (c) **Solid:** It applies a solid border.
  (d) **Double:** It applies a double border.
  (e) **Groove:** It applies a border that looks as though it is carved into the page ridge.
  (f) **Inset:** It applies a border that makes the box look like as if it is embedded in the page.
  (g) **Outset:** It applies a border that makes the box look like as if it is coming out of the canvas.
  (h) **None:** It applies no border.
  (i) **Hidden:** It applies a hidden border.

Example of border-style property:

```
File  Edit  Format  View  Help
<HTML>
<HEAD><TITLE>Border Style Property</TITLE>
</HEAD>
<BODY>
<P STYLE = "BORDER-WIDTH: 2px; BORDER-STYLE: none;">
        This paragraph has border with no width. </P>

<P STYLE = "BORDER-WIDTH: 2px; BORDER-STYLE: solid;">
        This paragraph has solid border. </P>

<P STYLE = "BORDER-WIDTH: 2px; BORDER-STYLE: dashed;">
        This paragraph has dashed border. </P>

<P STYLE = "BORDER-WIDTH: 2px; BORDER-STYLE: double;">
        This paragraph has double border. </P>

<P STYLE = "BORDER-WIDTH: 2px; BORDER-STYLE: groove;">
        This paragraph has groove border. </P>

<P STYLE = "BORDER-WIDTH: 2px; BORDER-STYLE: ridge">
        This paragraph has ridge border. </P>

<P STYLE = "BORDER-WIDTH: 2px; BORDER-STYLE: inset;">
        This paragraph has inset border. </P>

<P style = "BORDER-WIDTH: 2px; BORDER-STYLE: outset;">
        This paragraph has outset border. </P>

<P style = "BORDER-WIDTH: 2px; BORDER-STYLE: hidden;">
        This paragraph has hidden border. </P>
</BODY>
</HTML>
```
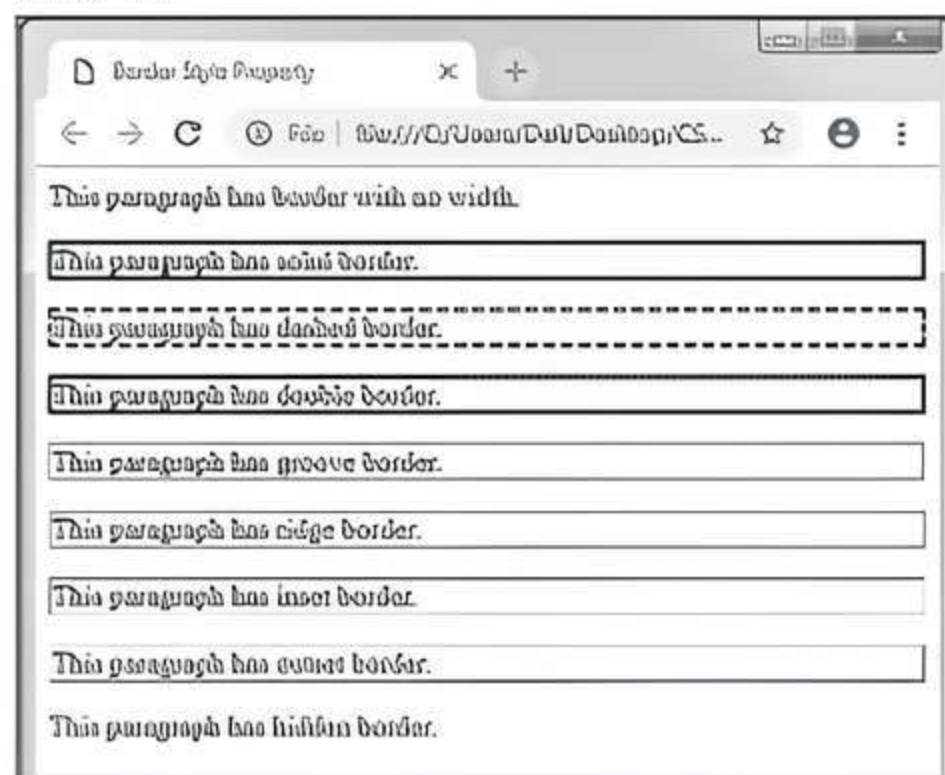
OUTPUT

Multiple Choice Questions

Q 1. The CSS property used to specify the transparency of an element is:

   a. hover   b. opacity

   c. clearfix   d. overlay

Q 2. The CSS property used to set the indentation of the first line in a block of text is:

   a. text-indent property

   b. text-stroke property

   c. text-decoration property

   d. text-overflow property

Q 3. The correct syntax to give a line over text is:

   a. Text-decoration: line-through

   b. Text-decoration: none

   c. Text-decoration: overline

   d. Text-decoration: underline

Q 4. CSS uses a numeric scale of multiples of ....

   a. 100 to 900   b. 100 to 700

   c. 100 to 500   d. 100 to 800

Q 5. The CSS specification also allows browser to render any.............................. value as normal.

   a. positive   b. negative   c. default   d. opposite

Fill in the Blanks

Q 6. The text decoration has to be rendered with ....

Q 7. The .... property allows you to add effects to text paragraphs by applying an indent to the first line of the paragraph.

Q 8. The text-transform property controls the .... of a text.

Assertion and Reason Type Questions

Directions (Q. Nos. 9-11): *In the questions given below, there are two statements marked as Assertion (A) and Reason (R). Read the statements and choose the correct option.*

   a. Both (A) and (R) are true and (R) is the correct explanation of (A).

   b. Both (A) and (R) are true, but (R) is not correct explanation of (A).

   c. (A) is true, but (R) is false.

   d. (A) is false, but (R) is true.

Q 9. **Assertion (A):** Border-style property specifies whether a border should be solid, dashed line, double line, or one of the other possible values.

   Reasons (R): The margin property specifies the space around elements.

Q 10. **Assertion (A):** The inline property specifies a line to be drawn around elements. The line is drawn outside the borders to make the element 'stand out' and to enhance its impact.

   Reasons (R): Different types of outline properties such as outline-style, outline-color, outline-width can be specified for an HTML tag.

Q 11. **Assertion (A):** The outline-width property is used to specify the width of the outline. It can have one of the values such as thin (typically 1px), medium (typically 3px), thick (typically 5px) or a fixed size given in px, pt, cm, em, etc.

   Reasons (R): The outline-color property is used to specify the colour of the outline. The color can be specified by giving a colour name, hexadecimal code, RGB value, etc.

Case Study Based Questions

Q 12. *Read the given passage carefully and answer the following questions:*

CSS stands for Cascading Style Sheets. It is a style sheet language which is used to describe the look and formatting of a document written in markup language. It provides an additional feature to HTML. It is generally used with HTML to change the style of web pages and user interfaces. It can also be used with any kind of XML documents including plan XML, SVG and XUL.

CSS is used along with HTML and JavaScript in most websites to create user interfaces for web applications and user interfaces for many mobile applications.

Before CSS, tags like font, color, background style, element alignments, border and size had to be repeated on every web page. This was a very long process. CSS provides more detailed attributes than plan HTML to define the look and feel of the website. CSS style definitions are saved in external CSS files so it is possible to change the entire websites by changing just one file.

   (i) What is CSS?

   (ii) Who invented CSS?

   (iii) Which of the following tag is used to embed css in html page?

   (iv) Which CSS selector is used to specify a rule to bind a particular unique element?

   (v) Which of the following CSS selectors are used to specify a group of elements?

(vi) In CSS, what does h1 can be called as ....

(vii) Which of the following has introduced text, list, box, margin, border, color and background properties?

Q 13. *Read the given passage carefully and answer the following questions:*

Comparing HTML and CSS: HTML and CSS are not really different from each other, rather CSS is an extension of HTML. CSS enhances basic HTML tags and attributes and improves the presentation of web pages. HTML pages contain HTML tags and different styles can be specified for these tags using CSS. A single CSS file can be linked to many web pages. All web pages will import the styles of the style sheet. Thus, we can say that HTML contains basic tags to create web pages, whereas CSS is an extension of HTML, as it specifies the formatting and appearance styles for these web pages.

(i) How CSS saves time to develop web pages?
(ii) How CSS is easy to maintain?
(iii) How CSS is compatible on multiple devices?
(iv) How CSS efficiently works with search engines?
(v) What do you mean by SEO?
(vi) Write any one disadvantage of using CSS.
(vii) Define Font size property in CSS.

Very Short Answer Type Questions

Q 14. Discuss the use of the font-family property.
Q 15. Discuss the use of the font-size property.
Q 16. Discuss the use of the background-color property.
Q 17. Why do we use the align property with an element?

Short Answer Type-I Questions

Q 18. Which CSS properties are used to set the foreground and background colour of the web pages?
Q 19. How can you set the image as background property?

Short Answer Type-II Questions

Q 20. Write an HTML code of an external style sheet file.
Q 21. Observe the following Web page and write HTML code to generate it.

This is a heading

> This is a paragraph.

> This is a paragraph.

> This is a paragraph.

Long Answer Type Questions

Q 22. Observe the following Web page and write HTML code to generate it.

Learinig HTML with internal CSS

This is a blue color paragraph

This is a blue color paragraph

This is a blue color paragraph

Q 23. Observe the following Web page and write HTML code to generate it.

CSS = Styles and Colors

Manipulate Text Colors, Boxes