

Question 1 : Why is it called a pseudo-class ?

Answer In CSS , pseudo-class is a keyword that is used to define a special state of an element. It is called a “pseudo” class because it is not a real class in the browser based on certain conditions.

For example , the ‘:hover’ pseudo-class is used to define the style that should be applied when an element is being hovered over by the mouse. Similarly, the ‘:active’ pseudo-class is used to define the styles that should be applied when an element is being clicked on.

The term "pseudo" is used to indicate that the class is not a real class in the sense that it does not correspond to any specific HTML element or attribute. It is simply a way of defining a special state or condition of an element that can be used to apply different styles or behaviours.

Overall, pseudo-classes are an important feature of CSS that allows developers to create more dynamic and interactive web pages.

Question 2: What are gradients in CSS ?

Answer: Gradient : It lets you display smooth transitions between two or more specified colours.

In CSS , gradients are a way of filling an element’s background with a smooth transition between two or more colours. Gradients can be used to create a variety of visual effects, such as shading , depth, and texture.

Gradients are defined using the ‘background-image’ property in CSS. There are three types of gradients:

Linear Gradients: A linear gradient creates a smooth transition between two or more colours in a straight line. To create a linear gradient, you specify the starting and ending colours, as well as the direction of the gradient using the background-image property.

Here's an example of a linear gradient that goes from red to yellow:

```
background-image: linear-gradient(to right, red, yellow);
```

Radial Gradients: A radial gradient creates a smooth transition between two or more colours in a circular pattern. To create a radial gradient, you specify the starting and ending colours, as well as the shape and size of the gradient using the background-image property.

Here's an example of a radial gradient that goes from blue to green:

```
background-image: radial-gradient(circle, blue, green);
```

Question 3 : What are different types of transition in CSS?

Answer : In CSS, the transition property is used to create smooth transitions between two states of an element, such as changes in its size, colour, or position. There are several different types of transition properties that can be used to control the timing and duration of the transition. Here are some of the most common ones:

1. **transition-property:** This property specifies the CSS property or properties that should be transitioned. For example, you can use `transition-property: colour;` to transition the colour of an element.
2. **transition-duration:** This property specifies the duration of the transition in seconds or milliseconds. For example, you can use `transition-duration: 0.5s;` to set the duration to half a second.
3. **transition-timing-function:** This property specifies the timing function used to control the acceleration and deceleration of the transition. There are several predefined timing functions available, such as `ease`, `linear`, and `ease-in-out`. Alternatively, you can define your own custom timing function using the `cubic-bezier()` function.
4. **transition-delay:** This property specifies a delay before the transition starts, in seconds or milliseconds. For example, you can use `transition-delay: 1s;` to delay the transition by one second.

Here's an example of how these properties can be combined to create a transition that changes the colour of a button over half a second with a delay of one second:

```
button {  
  transition-property: color;  
  transition-duration: 0.5s;  
  transition-timing-function: ease-in-out;  
  transition-delay: 1s;  
}
```

By using these properties, you can create smooth and visually appealing transitions that add polish and interactivity to your web pages.

