The opacity property in CSS is used to control the transparency of an element. It takes values from 0 to 1, where:

0 is completely transparent (invisible).

1 is fully opaque (not transparent at all).

Any value between 0 and 1 will make the element partially transparent.

Here's an example program to demonstrate the opacity property:

HTML and CSS Example:

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Opacity Example</title>

<style>

.opaque-box {

width: 200px;

height: 200px;

background-color: blue;

opacity: 0.5; /\* 50% transparent \*/

transition: opacity 0.5s;

}

.opaque-box:hover {

opacity: 1; /\* fully opaque when hovered \*/

}

</style>

</head>

<body>

<div class="opaque-box"></div>

</body>

</html>

Explanation:

1. The .opaque-box class defines a square div with a background-color of blue and width and height of 200px.

2. Initially, opacity is set to 0.5, making the box 50% transparent.

3. When the user hovers over the box, the opacity is changed to 1, making the box fully opaque again.

4. The transition property is used to smoothly animate the opacity change.