lightness()

Gets the lightness value of a color.

`lightness()` extracts the HSL lightness value from a p5.Color object, an array of color components, or a CSS color string.

By default, `lightness()` returns a color's HSL lightness in the range 0 to 100. If the colorMode() is set to HSL, it returns the lightness value in the given range.

Examples

```
function setup() {
  createCanvas(100, 100);

  background(50);

  // Use HSL color.
  colorMode(HSL);

  // Create a p5.Color object using HSL values.
  let c = color(0, 100, 75);

  // Draw the left rectangle.
  noStroke();
  fill(c);
  rect(15, 15, 35, 70);

  // Set 'lightValue' to 75.
  let lightValue = lightness(c);

  // Draw the right rectangle.
  fill(lightValue);
  rect(50, 15, 35, 70);

  describe('Two rectangles. The left one is salmon pink and
the right one is gray.');
}
```

```
function setup() {
  createCanvas(100, 100);

  background(50);

  // Use HSL color.
  colorMode(HSL);

  // Create a color array.
  let c = [0, 100, 75];

  // Draw the left rectangle.
  noStroke();
  fill(c);
  rect(15, 15, 35, 70);

  // Set 'lightValue' to 75.
  let lightValue = lightness(c);

  // Draw the right rectangle.
  fill(lightValue);
  rect(50, 15, 35, 70);

  describe('Two rectangles. The left one is salmon pink and
the right one is gray.');
}
```

```
function setup() {
  createCanvas(100, 100);

  background(50);

  // Use HSL color.
  colorMode(HSL);

  // Create a CSS color string.
  let c = 'rgb(255, 128, 128)';

  // Draw the left rectangle.
  noStroke();
  fill(c);
  rect(15, 15, 35, 70);

  // Set 'lightValue' to 75.
  let lightValue = lightness(c);

  // Draw the right rectangle.
  fill(lightValue);
  rect(50, 15, 35, 70);

  describe('Two rectangles. The left one is salmon pink and
the right one is gray.');
}
```

```
function setup() {
  createCanvas(100, 100);

  background(50);

  // Use HSL color with values in the range 0-255.
  colorMode(HSL, 255);

  // Create a p5.Color object using HSL values.
  let c = color(0, 255, 191.5);

  // Draw the left rectangle.
  noStroke();
  fill(c);
  rect(15, 15, 35, 70);

  // Set 'lightValue' to 191.5.
  let lightValue = lightness(c);

  // Draw the right rectangle.
  fill(lightValue);
  rect(50, 15, 35, 70);

  describe('Two rectangles. The left one is salmon pink and
the right one is gray.');
}
```

Syntax

```
lightness(color)
```

Parameters

color	p5.Color|Number[]|String: p5.Color object, array of color components, or CSS color string.

Returns

Number: the lightness value.

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Related References

setAlpha
Sets the alpha (transparency) value of a color.

setBlue
Sets the blue component of a color.

setGreen
Sets the green component of a color.

setRed
Sets the red component of a color.