

let

Declares a new variable.

A variable is a container for a value. For example, a variable might contain a creature's x-coordinate as a `Number` or its name as a `String`. Variables can change value by reassigning them as follows:

```
// Declare the variable x and assign it the value 10.
let x = 10;

// Reassign x to 50.
x = 50;
```

Variables have block scope. When a variable is declared between curly braces `{ }`, it only exists within the block defined by those braces. For example, the following code would throw a `ReferenceError` because `x` is declared within the `setup()` function's block:

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

  let x = 50;
}

function draw() {
  background(200);

  // x was declared in setup(), so it can't be referenced here.
  circle(x, 50, 20);
}
```

Variables declared outside of all curly braces `{ }` are in the global scope. A variable that's in the global scope can be used and changed anywhere in a sketch:

```
let x = 50;

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

function draw() {
  background(200);

  // Change the value of x.
  x += 10;

  circle(x, 50, 20);
}
```

Examples

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

  background(220);

  // Style the text.
  textAlign(CENTER);
  textSize(16);

  // Create the message variable.
  let message = 'Hello, 🌍!';

  // Display the message.
  text(message, 50, 50);

  describe('The text "Hello, 🌍!" written on a gray background.');
```

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```
let x = 0;

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

  describe('A white circle moves from left to right against a gray background.');
```

```
function draw() {
  background(220);

  // Change the value of x.
  x += 1;

  circle(x, 50, 20);
}
```

This page is generated from the comments in [src/core/reference.js](#). Please feel free to edit it and submit a pull request!

Related References

class A template for creating objects of a particular type.	console Prints a message to the web browser's console.	for A way to repeat a block of code when the number of iterations is known.	function A named group of statements.
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