

Reference > keyPressed()

keyPressed()

A function that's called once when any key is pressed.

Declaring the function `keyPressed()` sets a code block to run once automatically when the user presses any key:

```
function keyPressed() {
  // Code to run.
}
```

The `key` and `keyCode` variables will be updated with the most recently typed value when `keyPressed()` is called by p5.js:

```
function keyPressed() {
  if (key === 'c') {
    // Code to run.
  }

  if (keyCode === ENTER) {
    // Code to run.
  }
}
```

The parameter, `event`, is optional. `keyPressed()` is always passed a `KeyboardEvent` object with properties that describe the key press event:

```
function keyPressed(event) {
  // Code to run that uses the event.
  console.log(event);
}
```

Browsers may have default behaviors attached to various key events. For example, some browsers may jump to the bottom of a web page when the `SPACE` key is pressed. To prevent any default behavior for this event, add `return false;` to the end of the function.

Examples

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// Click on the canvas to begin detecting key presses.

```
let value = 0;

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

  describe(
    'A gray square with a black square at its center. The inner square changes color when the user presses a key.'
  );
}

function draw() {
  background(200);

  // Style the square.
  fill(value);

  // Draw the square.
  square(25, 25, 50);
}

// Toggle the background color when the user presses a key.
function keyPressed() {
  if (value === 0) {
    value = 255;
  } else {
    value = 0;
  }
  // Uncomment to prevent any default behavior.
  // return false;
}
```

▶

■

// Click on the canvas to begin detecting key presses.

```
let value = 0;

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

  describe(
    'A gray square with a white square at its center. The inner square turns black when the user presses the "b" key. It turns white when the user presses the "a" key.'
  );
}

function draw() {
  background(200);

  // Style the square.
  fill(value);

  // Draw the square.
  square(25, 25, 50);
}

// Reassign value when the user presses the 'a' or 'b' key.
function keyPressed() {
  if (key === 'a') {
    value = 255;
  } else if (key === 'b') {
    value = 0;
  }
  // Uncomment to prevent any default behavior.
}
```

▶

■

// Click on the canvas to begin detecting key presses.

```
let value = 0;

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

  describe(
    'A gray square with a black square at its center. The inner square turns white when the user presses the left arrow key. It turns black when the user presses the right arrow key.'
  );
}

function draw() {
  background(200);

  // Style the square.
  fill(value);

  // Draw the square.
  square(25, 25, 50);
}

// Toggle the background color when the user presses an arrow key.
function keyPressed() {
  if (keyCode === LEFT_ARROW) {
    value = 255;
  } else if (keyCode === RIGHT_ARROW) {
    value = 0;
  }
}
```

Syntax

```
keyPressed([event])
```

Parameters

`event` `KeyboardEvent`: optional `KeyboardEvent` callback argument.

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

Related References

key A String system variable that contains the value of the last key typed.	keyCode A Number system variable that contains the code of the last key typed.	keysDown Returns true if the key it's checking is pressed and false if not.	keysPressed A Boolean system variable that's true if any key is currently pressed and false if not.
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