

# Code Debugging

Programming code might contain syntax errors, or semantic errors.

Many of these errors are easy to diagnose.

Often, when code contains errors, nothing will occur. There are no error messages, and you will get no indications where to search for errors.

Searching for (and fixing) errors in programming code is called debugging.

## JavaScript Debuggers

Debugging JavaScript is not easy. But fortunately, all modern browsers have a built-in debugger.

Built-in debuggers can be toggled on and off, forcing errors to be reported to the user.

With a debugger, you can also set breakpoints (places where code execution can be stopped), and examine variables while the code is executing.

Normally, otherwise follow the steps at the bottom of this page, you activate debugging in your browser with the F12 key, and select "Console" in the debugger menu.

## The console.log() Method

If your browser supports debugging, you can use `console.log()` to display JavaScript values in the debugger window:

```
<!DOCTYPE html>
<html>
<body>
```

```
<h1>My Second Web Page</h1>
```

```
<script>
a = 5;
b = 7;
c = a + b;
console.log(c);
</script>
```

```
</body>
</html>
```