

Introduction to JavaScript

BY DR DEREK PEACOCK

A solid blue horizontal bar at the bottom of the page.

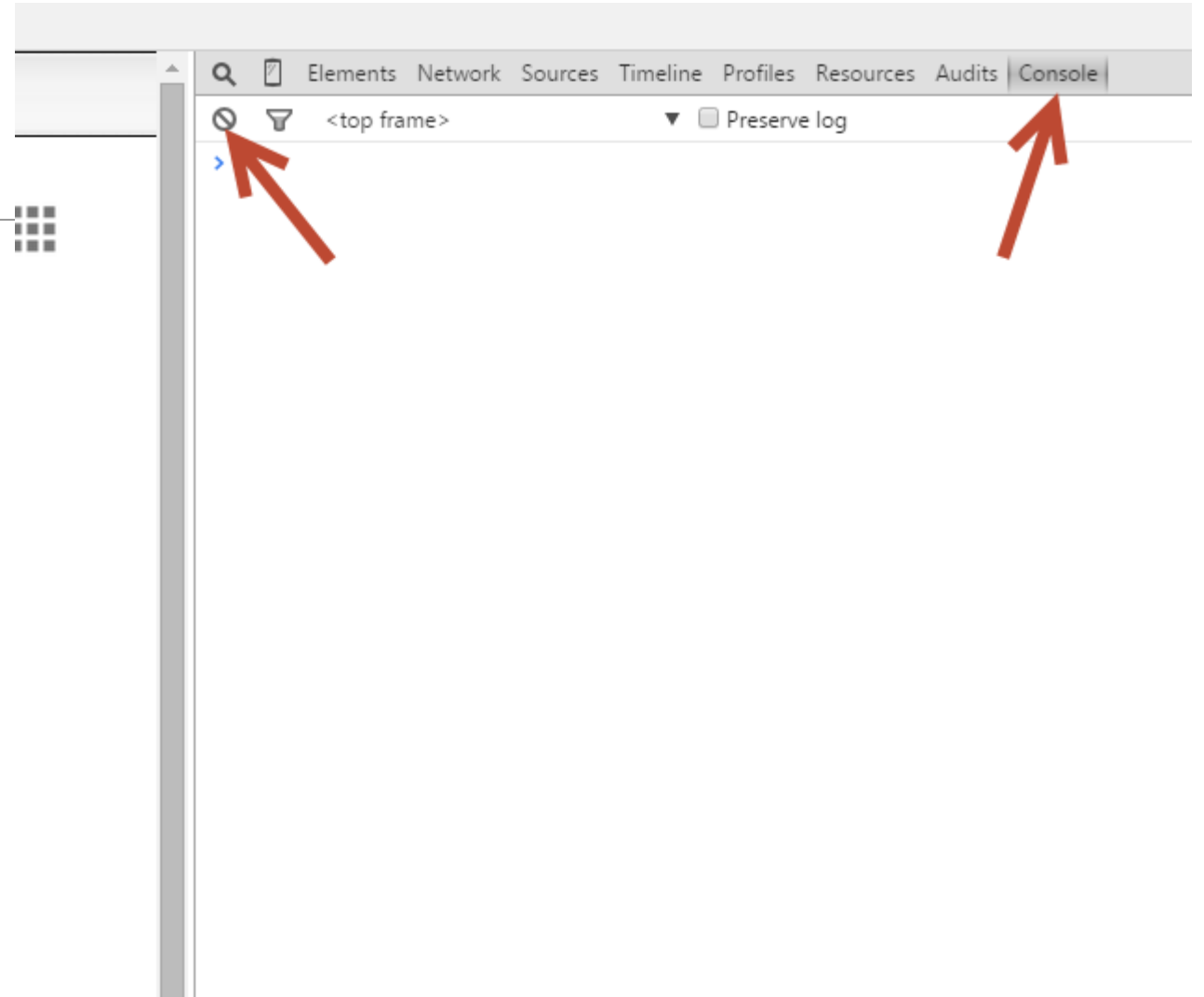
Browser Console

Open Chrome

Right click and select inspect element

Select Console

Select clear console



Creating Output

```
alert("Hello world!");
```

```
alert(2 + 3);
```

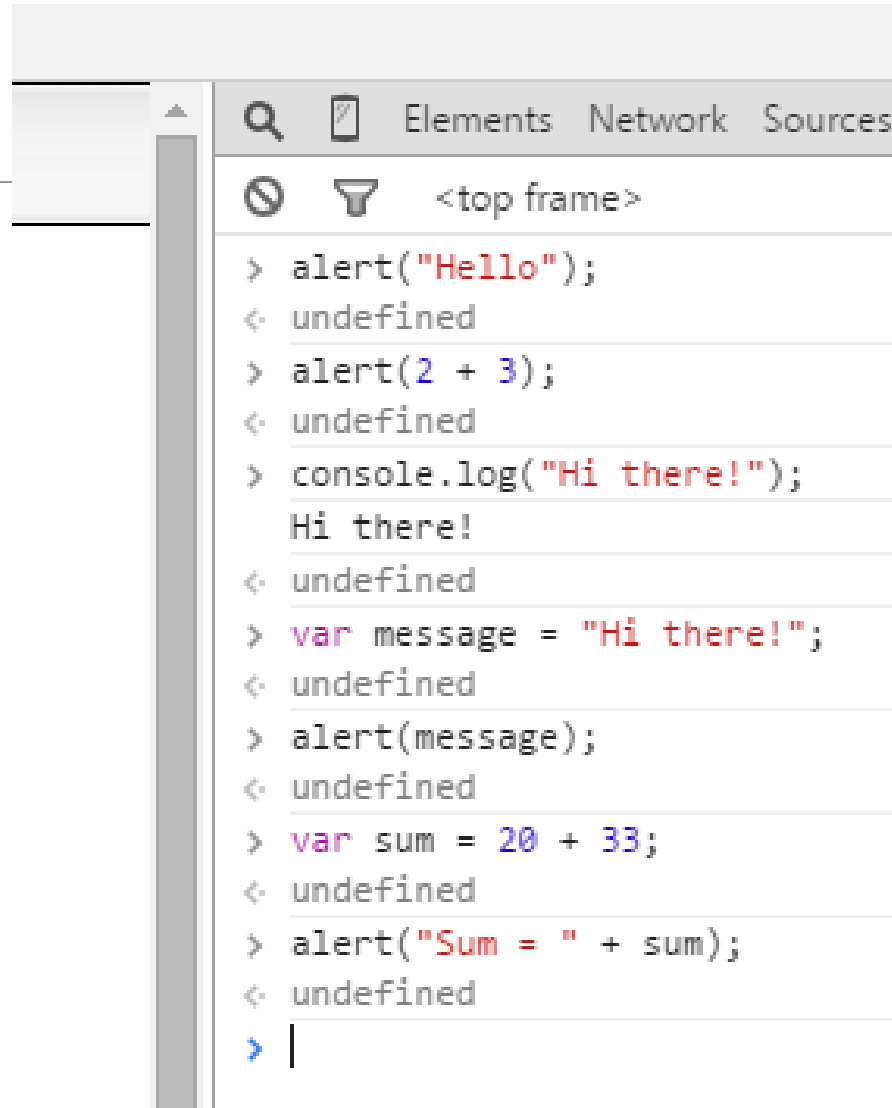
```
console.log('Hi there!');
```

```
var message = "Hi there!";
```

```
alert(message);
```

```
var sum = 20 + 33;
```

```
alert("Sum = " + sum);
```



```
Elements Network Sources  
<top frame>  
> alert("Hello");  
< undefined  
> alert(2 + 3);  
< undefined  
> console.log("Hi there!");  
Hi there!  
< undefined  
> var message = "Hi there!";  
< undefined  
> alert(message);  
< undefined  
> var sum = 20 + 33;  
< undefined  
> alert("Sum = " + sum);  
< undefined  
> |
```

Selecting Alternatives

```
var age = 33;

if(age < 35)
{
    alert("You are young!");
}
else
{
    alert("Getting older!");
}

age = 37;
```

```
< undefined
> age = 44;
< 44
> if(age < 35)
{
    alert("You are young!");
}
else
{
    alert("getting older!");
}
< undefined
```

The page at <https://www.google.co.uk> says:

getting older!

OK

Arrays

```
var myList = ["Wine", "Beer", "Cider"];
```

```
myList[0];
```

```
myList[1] = "Larger";
```

```
myList;
```

```
myList[3] = "Beer";
```

```
myList;
```



The screenshot shows a browser's developer console with the following content:

- Search, Elements, Network, Sources, Timeline, and Profile tabs are visible at the top.
- The console title is "<top frame>" with a "Preserve" checkbox.
- Execution log:
 - > var myList = ["Wine", "Beer", "Cider"];
 - < undefined
 - > myList
 - < ["Wine", "Beer", "Cider"]
 - > myList[0];
 - < "Wine"
 - > |

Using jQuery

```
<script src="https://code.jquery.com/jquery-2.1.3.js"  
    type="text/javascript">  
</script>  
<script>  
    $("header h1").html("My Page Header")  
</script>
```

Appending HTML

```
<script>
    $("header h1").html("My Page Header");
    $("ul").append("<li>Wine</li>");
    $("ul").append("<li>Lager</li>");
</script>
```

My Page Header

The Content of My Site

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Interdum et malesuada fames ac ante ipsum pharetra scelerisque tempor. Pellentesque condimentum ac, ornare mollis tellus. Maecenas et turpis duis. est eros facilisis tortor, fringilla posuere metus.

- Beer
- Cider
- Wine
- Lager

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Removing HTML

```
$("#ul li:eq(0)").remove(); // remove the first list item
```

```
$("#ul li:eq(1)").remove(); // remove the second list item
```


Responding to Events

```
$("#addDrink").click(function()
{
    var name = $("#drink").val();
    $("#ul").append("<li>" + name + "</li>");
});
```

- Beer
- Cider
- Wine
- Lager

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```
</p>
<ul>
    <li>Beer</li>
    <li>Cider</li>
</ul>
<input id="drink" type="text" />
<button id="addDrink" >Add Drink</button>
```

Named & Anonymous functions

```
function doSomething (parameter)
{
    // do something with the parameter;
}
```

```
function (parameter)
{
    // do something with the parameter;
}
```

```
doSomething("Data");
```

```
doSomething(20);
```

Showing & Hiding

jQuery Show & Hide

Please click on the buttons!

Panel 1

Panel 2

Panel 3

Panel 4

Panel 1

My Content

Panel 2

My Content

Panel 3

My Content

Panel 4

My Content

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Using Bootstrap

```
<head>
```

```
  <title>jQuery Magic</title>
```

```
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap...">
```

```
</head>
```

```
<body>
```

```
  <div class="container">
```

```
    <header>
```

```
      <h1>jQuery Show & Hide</h1>
```

```
    </header>
```

Using Bootstrap 2

```
<section class="jumbotron">
  <h2>Please click on the buttons!</h2>
  <div>
    <button id="button1">Panel 1</button>
    <button id="button2">Panel 2</button>
    <button id="button3">Panel 3</button>
    <button id="button4">Panel 4</button>
  </div>
</section>
```

Using Bootstrap 3

```
<section class="row">  
  <div class="col-xs-3">  
    <div id="panel1" class="panel panel-primary">  
      <div class="panel-heading">Panel 1</div>  
      <div class="panel-body">My Content</div>  
    </div>  
  </div>  
  
  <div class="col-xs-3">
```

jQuery Show & Hide

```
<script>
  $(function () {
    $("#button1").on('click', function () {
      $('#panel1').toggle();
    });
    $("#button2").on('mouseover', function () {
      $('#panel2').fadeToggle(200);
    });
  });
</script>
```