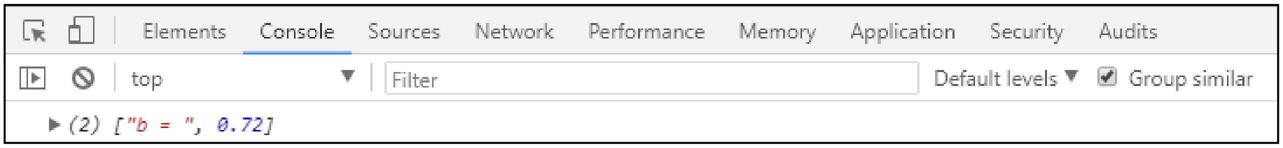
More about functions

Anonymous functions

Anonymous functions do not have names, so they need to be tied to something, a variable, or an event, or something similar to run. Anonymous functions are used mainly when the function is not called often in different part on the script.

```
var x = function(){

var a =5/7;
var b =
8/25;

var result;

  a>b? result =["a = ",a] : result = ["b = ",b];
  console.log(result);

}
```

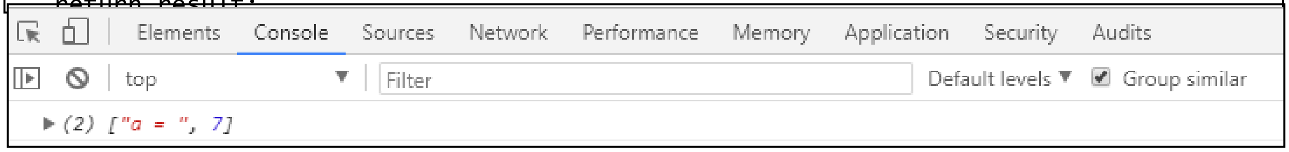
Example) Anonymous function without argument and return value



```
▶ (2) ["b = ", 0.72]
```

Example) Return the value in an anonymous function

```
var x = function(){

var a =7;

var b = -18;


var result;

  a>b? result =["a = ",a] : result = ["b = ",b];
  return result;
```



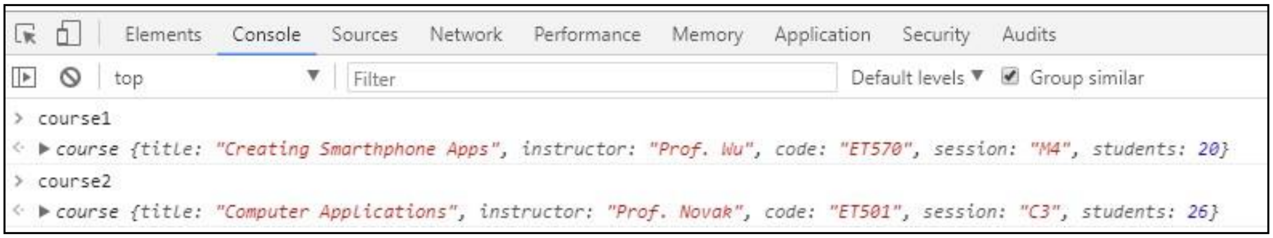
```
▶ (2) ["a = ", 7]
```

Object constructor using functions

Object Constructors are templates for creating objects that we define once and then we can use those templates again and again.

To make a constructor for any object we start with function, then we give our function a name and here we capitalize the first letter to signify this is an object.

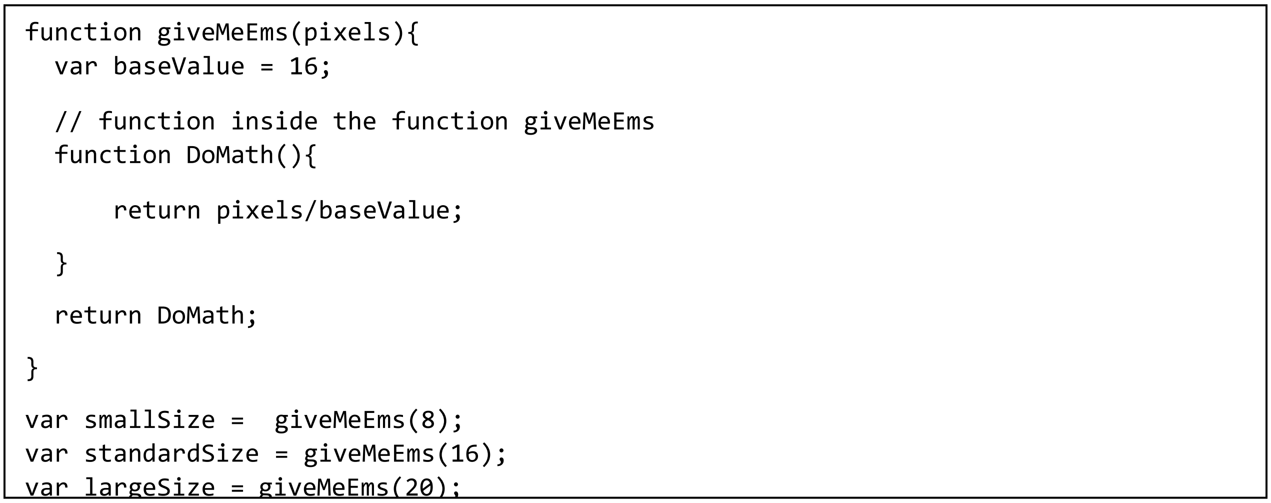
```
// Create an object function named course

function course(title, instructor, code, session, students){
  this.title = title;

  this.instructor = instructor;
  this.code = code;
  this.session= session;
  this.students = students;

};

// call for object function
```



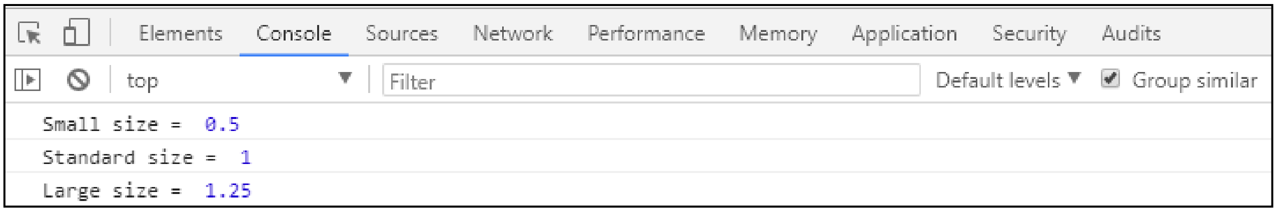
```
> course1
< ▶course {title: "Creating Smarthphone Apps", instructor: "Prof. Wu", code: "ET570", session: "M4", students: 20}
> course2
< ▶course {title: "Computer Applications", instructor: "Prof. Novak", code: "ET501", session: "C3", students: 26}
```

Closure

A closure is a function inside a function that relies on variables in the outside function to work



```
function giveMeEms(pixels){
  var baseValue = 16;

  // function inside the function giveMeEms
  function DoMath(){

      return pixels/baseValue;

  }

  return DoMath;

}

var smallSize =  giveMeEms(8);
var standardSize = giveMeEms(16);
var largeSize = giveMeEms(20);
```



```
Small size =  0.5
Standard size =  1
Large size =  1.25
```