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# Advanced Coding Club using JavaScript (week 4)

Mr Johanson

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Last week we learned...

1. Not to put spaces in Variable names and put semi-colons at the end of the Statement lines!
  2. Conditions and the different logic (equals,greater,less than,etc)
  3. While LOOPS
  4. This week we're doing functions and some hacking!
-

# Functions

```
/*
```

In our programs, we sometimes need to do a task or run statements more than one time.

This is something a function can do for you


For example

```
*/
```

```
// lets get a random number
```

```
var num = Math.random();  
alert( num );
```

This is a special javascript function to make a number



```
// lets get another random number
```

```
var num = Math.random();  
alert( num );
```

```
// and another random number
```

```
var num = Math.random();  
alert( num );
```

```
/*
```

with a function we can do this in an easier way

```
*/
```

```
// lets make a function first
```

```
function ShowRandom()  
{  
    var num = Math.random();  
    alert( num );  
}
```

```
ShowRandom();  
ShowRandom();
```

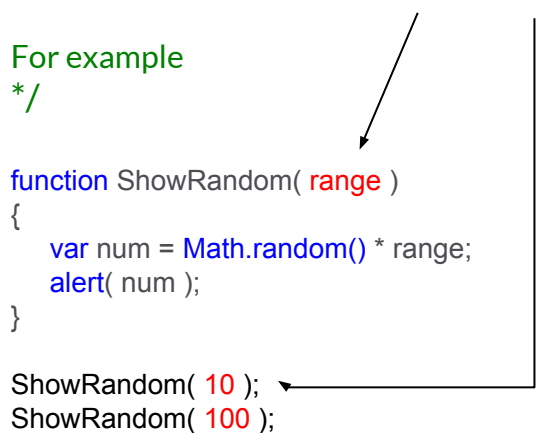
# More Functions

/\*  
Some functions we might want to “give” it some variables so that it can do something with them

These are called **parameters or arguments**

For example

```
*/  
  
function ShowRandom( range )  
{  
    var num = Math.random() * range;  
    alert( num );  
}
```



```
ShowRandom( 10 );  
ShowRandom( 100 );
```

/\*  
As well as giving the function a variable or variables  
The function can “pass back” a variable

\*/

```
function GetRandomNumber( range )  
{  
    var num = Math.random() * range;  
    return( num );  
}
```

```
var numFirst = GetRandomNumber( 10 );  
alert( numFirst );
```

```
var numSecond = GetRandomNumber( 10000 );  
alert( numSecond );
```

**So...**

- 1. You know how to make variables**
- 2. Test them with IF statements**
- 3. You know about LOOPS**
- 4. You found out about Functions.**
- 5. Let's look at a program ...**

# Objects

Objects in JavaScript, are much like objects in real life. The concept of objects in JavaScript can be understood with real life, tangible objects.

An Orange is an **object**

A Car is an **object**

A Person is an **object**

Objects can have **Variables** and **Functions** that ONLY work for them

So ...

An Orange has a color (a variable)

An Orange has a shape (a variable)

An Orange has a size (a variable)

An Orange can be squeezed (a function)

An Orange can be peeled (a function)

```
function Car()
{
  this.make = "Peugeot";
  this.model = "208";
  this.year = "2012";
  this.owner = "Mr Johanson";
}
var objMyCar = new Car();

alert(objMyCar.make);
```