

JavaScript Loops - For

JavaScript Loops

- Use to run the same code over and over.
- Types of Loops
 - for
 - for / in
 - while
 - do while

for Syntax

Loops through a block of code a number of times.

```
for (statement 1; statement 2; statement 3)  
{  
    code block to be executed;  
}
```

```
for (statement 1; statement 2; statement 3)  
{  
    code block to be executed  
}
```

statement 1 is executed (one time) **before** the block of code is executed.

statement 2 defines the condition for executing the code block.

****If condition is true**, code block executed.

statement 3 is executed (every time) **after** the code block has been executed.

<script>

i++ same as i = i + 1

var text = "";

var i;

for (i = 0; i < 5; i++)

{

text += "The number is " + i + "
";

}

document.getElementById("demo").innerHTML = text;

</script>

text += i same as text = text + i

```
<script>
```

```
var i;
```

```
for (i = 0; i < 5; i++)
```

```
{
```

```
    code block to be executed;
```

```
}
```

```
</script>
```

statement1	statement2	statement3
i	i < 5 condition is tested, if TRUE, code block executed	i ++ increment
i = 0	0 < 5 TRUE	i = i + 1 0 + 1
i = 1	1 < 5 TRUE	i = i + 1 1 + 1
i = 2	2 < 5 TRUE	i = i + 1 2 + 1
i = 3	3 < 5 TRUE	i = i + 1 3 + 1
i = 4	4 < 5 TRUE	i = i + 1 4 + 1
i = 5	5 < 5 FALSE	Loops Stops

```
<p id = "demo">This HTML will change</p>
```

```
<script>
```

```
var text = "";
```

```
var i;
```


```
for (i = 0; i < 5; i+1)
```

```
{
```

```
    text = "The number is " + text + i + "<br>";
```

```
}
```

```
document.getElementById("demo").innerHTML = text;
```



```
</script>
```

Changing a HTML element

```
<script>
```

```
var text = "";
```

```
var i;
```

```
for (i = 0; i < 5; i+1)
```

```
{
```

```
    document.write( i + "Print whatever you want here");
```

```
}
```

```
</script>
```

REMINDER: Use for testing, Output to the HTML document



REMINDER: Used for testing, Output to the browser console – F12

```
<script>
```

```
var text = "";
```

```
var i;
```

```
for (i = 0; i < 5; i+1)
```

```
{
```

```
    console.log( i + "Print whatever you want here");
```

```
}
```

```
</script>
```