

# JavaScript Loops – while

# while Syntax

The while loop loops through a block of code as long as a specified condition is **true**.

```
while (condition)  
{  
    code block to be executed;  
}
```

# while Syntax - the code in the loop will run, over and over again, as long as a variable (i) is less than 10

```
<script>
```

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

```
var i = 0;
```

```
while (i < 10)
```

```
{
```

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

```
    i++;
```

```
}
```

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

```
</script>
```

<b>i</b>	<b>i &lt; 10    condition is tested, if TRUE, code block executed</b>	<b>increment i ++</b>
i = 0	<b>0 &lt; 10    TRUE</b>	i = i + 1    0 + 1
i = 1	<b>1 &lt; 10    TRUE</b>	i = i + 1    1 + 1
i = 2	<b>2 &lt; 10    TRUE</b>	i = i + 1    2 + 1
i = 3	<b>3 &lt; 10    TRUE</b>	i = i + 1    3 + 1
i = 4	<b>4 &lt; 10    TRUE</b>	i = i + 1    4 + 1
i = 5	<b>5 &lt; 10    TRUE</b>	i = i + 1    5 + 1
i = 6	<b>6 &lt; 10    TRUE</b>	i = i + 1    6 + 1
i = 7	<b>7 &lt; 10    TRUE</b>	i = i + 1    7 + 1
i = 8	<b>8 &lt; 10    TRUE</b>	i = i + 1    8 + 1
i = 9	<b>9 &lt; 10    TRUE</b>	i = i + 1    9 + 1
i = 10	<b>10 &lt; 10    FALSE</b>	Loop stops

# do while Syntax

Loop will execute the code block once, before checking if the condition is **true**

```
do
{
    code block to be executed
}
while (condition);
```

# do while Syntax

```
<script>  
var text = ""  
var i = 0;
```

```
do  
{  
    text += "<br>The number is " + i;  
    i++;  
}  
while (i < 10);
```

```
document.getElementById("demo").innerHTML = text;  
</script>
```

The do while loop  
**code executes at least once** as long  
then continues if  
condition is **true**.