

## Week 10

- Loops
- Break statement
- Factorials

### Loops

The most common loops are the for and while loops.

<b>while</b>	<code>while (condition) {     <i>code block to be executed</i> }</code>
<b>for</b>	<code>for (statement 1; statement 2; statement 3) {     <i>code block to be executed</i> }</code>

Examples:

```
var i;  
while (i <= 10) {  
    console.log(i);  
    i=i+1;  
}
```

```
var i;  
for (i = 0; i <= 10; i++) {  
    console.log(i);  
}
```

Both loops will count from 0 to 10, but the code is different.

## Break Statement

```
var i;  
for (i = 0; i < 10; i++) {  
    if (i === 3) { break; }  
    text += "The number is " + i;  
}
```

Output:  
The number is 0  
The number is 1  
The number is 2

The break statement is used to jump out of a loop. It breaks the loop if the condition is met and executes the code after the loop.