

## Javascript to Go Cheat Sheet

Javascript	Go
<code>somefunction()</code>	<code>func main() {     somefunction() }</code>
<code>var myFunc = function() {};</code>	<code>var myFunc = func(){};</code>
<code>function myFunc() {  }</code>	<code>func myFunc() {  }</code>
<code>var x = 5;</code>	<code>var x int = 5 (anywhere) x := 5 (only in func)</code>
<code>var x = 5; x = "Hello";</code>	<code>// can't do this</code>
<code>// no constants</code>	<code>const x = 5</code>
<code>var x = 1, y = 2;</code>	<code>var x, y = 1, 2</code>
<code>var x; // undefined</code>	<code>var x int // 0</code>
<code>"Hello World"</code>	<code>var mySaying string = "Hello" var myBacktick string = `He"ll"o`</code>
<code>1234</code>	<code>1234</code>
<code>1234.2</code>	<code>1234.2</code>

<code>+, -, /, %</code>	<code>+, -, /, %</code>
<code>true, false</code> <code>&amp;&amp;</code> <code>  </code>	<code>true, false</code> <code>&amp;&amp;</code> <code>  </code>
<code>x === y</code>	<code>x == y</code>
<code>if (i &lt; 10)</code> <code>{</code>  <code>}</code> <code>else if (i &lt; 20)</code> <code>{</code>  <code>}</code> <code>else</code> <code>{</code>  <code>}</code>	<code>if i &lt; 10 {</code> <code>} else if (i &lt; 20) {</code> <code>} else {</code>  <code>}</code>
<code>while (whatever) {</code>  <code>}</code>	<code>for whatever {</code>  <code>}</code>
<code>while (true) {</code>  <code>}</code>	<code>for {</code>  <code>}</code>
<code>for (var i = 0; i &lt; 10; i++) {</code>  <code>}</code>	<code>for i := 0; i &lt; 10; i++ {</code>  <code>}</code>

<pre> var i; for (i = 0; i &lt; 10; i++) {  } </pre>	<pre> var i int for i = 0; i &lt; 10; i++ {  } </pre>
<pre> var obj = {   "x": "y",   "y": 10, }; for (var key in obj) {   console.log("Key is:", key);   console.log("Value is:", obj[key]); } </pre>	<pre> obj := map[string]string {   "x": "y",   "y": "z", } for key := range obj {   fmt.Println("Key is:", key)   fmt.Println("Value is:", obj[key]) } </pre>
<pre> var xs = [1,2,3,4]; </pre>	<pre> xs := [4]int {1,2,3,4} </pre>
<pre> var xs = [1,2,3,4]; xs.push(5,6,7,8); </pre>	<pre> xs := []int {1,2,3,4} xs = append(xs,5,6,7,8) </pre>
<pre> // add to head &lt;script src="fmt.js"&gt;&lt;/script&gt; // fmt.js fmt = {   Println: function() { } } // or var fmt = require("fmt") </pre>	<pre> import "fmt"  // fmt.go func Println() {  } </pre>
<pre> function sum() {   for (var i=0; i&lt;arguments.length; i++) {    } } </pre>	<pre> func sum(xs ...int) int {   for key, value := range xs {    } } sum(1,2,3) sum([]{1,2,3}) </pre>

}	
<pre> (function(n) {     if (n == 0    n == 1) {         return 1;     } else {         return n * arguments.callee(n-1);     } })(5) </pre>	<pre> var factorial func(int) int factorial = func(n int) int {     if n == 0    n == 1 {         return 1     } else {         return n * factorial(n-1)     } } </pre>
<pre> function MyClass(x) {     this.x = x; } MyClass.prototype = {     "whatever": function() {         console.log(this.x);     } }; MyClass.prototype.someOtherMethod = function() {  }; var obj = new MyClass(5); obj.whatever(); </pre>	<pre> type MyClass struct {     x int } func NewMyClass(x int) *MyClass {     return &amp;MyClass{         x: x,     } } func (this *MyClass) whatever() {     fmt.Println(this.x) } bs, err := ioutil.ReadAll(f) if err != nil {     log.Fatalln("my program broke") }  str := string(bs) func main() {     obj := NewMyClass(5)     obj.whatever() } </pre>

<pre>var str = JSON.stringify({ "a": "b"})</pre>	<pre>bs, err := json.Marshal(map[string]string{"a":"b"})</pre>
<pre>try { var obj = JSON.parse(str) } catch(err) {  }</pre>	<pre>var obj map[string]string err := json.Unmarshal(str, &amp;obj)</pre>