| Control flow          | <ul> <li>Code executes from top to bottom</li> <li>Conditional execution allows you to code a program with two different routes based on a boolean value</li> </ul>   | Human example of conditional execution: I will meet with my wife for dinner. IF she wants pizza, we will get pizza. IF she DOES NOT want pizza, we will get something else.  |
|-----------------------|---|--|
| If/Else<br>Statements | <ul> <li>"If" statements are helpful when you are unsure of input and want to set up alternative directions</li> <li>"If" statements evaluate a condition that returns a boolean true or false → if the boolean returns 'true', the code in the "if" statement block will execute</li> <li>"If" statements can be chained with "else" and/or "else if" statements to set up alternative code blocks to be executed</li> </ul> | <pre>var lexiWants = 'pizza'  if(lexiWants === 'pizza') {    console.log("Let's go get pizza!"); } var lexiWants = 'sushi'  if(lexiWants === 'pizza') {    console.log("Let's go get pizza!"); } else if(lexiWants === 'salad') {    console.log("Are you sure?"); } else {    console.log("So what would you like?"); }</pre> |
|                       | - You can also set up additional conditions using && or   | var jonWants = 'pizza'  if(lexiWants === 'pizza' && jonWants === 'pizza') {     console.log("Let's go get pizza!")   |
| Loops                 | <ul> <li>Loops create the ability to repeat a block of code with control over how many times the block of code runs</li> <li>each time the block of code runs is called an <u>iteration</u></li> <li>you can loop over strings, arrays, and objects</li> <li>For loop - used to iterate (run a block of code) a specific number of times, or, when its condition</li> </ul>   | For loop: for (var index=0; index < 10; index++) { // run code   |

```
returns false:
                                       }
for (declare variables; condition;
count) {
  // run code
}
                                       While loop:
                                        var counter = 0;
While loop - repeats a code block
                                       while (counter < 10) {
until its test condition returns
                                          // run code
false:
                                          counter++
var counter = 0;
                                       }
while (condition) {
  // run code
  counter++
                                       Looping through an object:
}
                                       var petNames = {dog: 'Max', cat:
                                       'Mewie', bird: 'Bluey'};
Looping through an object:
                                       for (var pet in petNames) {
for (var key* in object) {
                                          console.log(petNames[pet]);
  // run code
                                       };
}
                                       → 'Max', 'Mewie', 'Bluey'
*key is a placeholder that iterates
over every key in the object
```