

2. What is the syntax of one of the loops in your above answer? How and when should you use this loop? Give an example.

- One of the Javascript loops is the “for” loop. When you are writing the for loop in code you would follow the word “for” with an expression or variable and then a block of code in curly brackets. You would utilize this loop when you want the computer to check for a certain condition to determine what it should do next. An example of this would be:

```
“for (var i = 0; i < 3; i++) {  
    let name = "John Doe";  
    console.log("Hi, my name is " + name);  
}”
```

In this example, we would be telling the computer to print “Hi my name is John Doe” and the for loop is used to tell the computer to loop that phrase and print it multiple times under certain conditions. Here we use a boolean expression where “i” represents the line number. When “var i=0” means that if the line number is 0, which is the first line, then the computer will print the phrase and continue to print the phrase as long as the line number is less than 3. The “i++” command is telling the computer to continue to print the phrase each time i is incremented by 1 from 0. Finally, “i < 3” is what is going to terminate the loop; once “i” is equal to 3 the loop will terminate because i is no longer less than 3.

- Sources:

[https://www.w3schools.com/js/js\\_loop\\_for.asp#:~:text=Different%20Kinds%20of%20Loops&text=for%20%2D%20loops%20through%20a%20block,a%20specified%20condition%20is%20true](https://www.w3schools.com/js/js_loop_for.asp#:~:text=Different%20Kinds%20of%20Loops&text=for%20%2D%20loops%20through%20a%20block,a%20specified%20condition%20is%20true)

<https://www.freecodecamp.org/news/javascript-for-loops/>

3. What is the syntax of another one of the loops in your above answer? How and when should you use this loop? Give an example.

- Another loop in Javascript is the “do/while” loop. When you are writing this loop you would write the word “do” followed by curly brackets that have the code to be executed inside of it and then that is followed with the word “while” with an expression or variable in parentheses. You would use this loop when you want the computer to continue to execute a certain code of block or action whenever a particular statement is true or when you only want the code or action to be done once. An example of a “do/while” loop is:

```
let text = "";  
let i = 0;  
do {  
  text += i + "<br>";  
  i++;  
}  
while (i < 5);
```

This code is telling the computer to execute the block code which will create a list of numbers; as long as that list of numbers is less than 5.

- Sources:

[https://www.w3schools.com/jsref/jsref\\_dowhile.asp](https://www.w3schools.com/jsref/jsref_dowhile.asp)