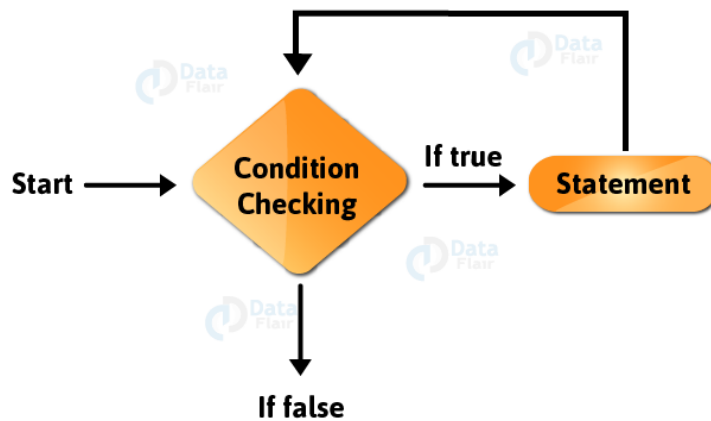


Loops:

While:



A **while** statement in JavaScript executes until our boolean condition evaluates to **true**. This loop is an entry controlled loop.

- If the test condition returns **false**, then control passes to the statement just after the loop.
- If the test condition returns **true**, the loop body is executed and the condition is tested again.

syntax :

while (boolean condition)

statement

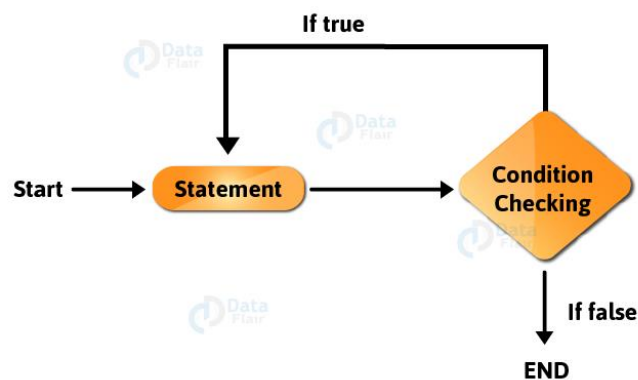
```
Day6 > loops > js_while_loop.html > body > script
1 <!-- *****While Loop ***** -->
2 <!-- A while statement in JavaScript executes until our boolean condition evaluates to true. This loop is an entry controlled loop.
3
4 1.If the test condition returns false, then control passes to the statement just after the loop.
5 2. If the test condition returns true, the loop body is executed and the condition is tested again.
6 Syntax:
7 while ( boolean condition)
8     statement -->
9
10
11 <html>
12 <body>
13 <script>
14     var iterator1 = 0; //iteration variable initialised with 0
15     while (iterator1 < 5) //Testing the condition
16         //while (iterator1 <= 5) //Testing the condition (Check this also)
17     {
18         document.write(iterator1 + " " + "Antrunys Techs/br");
19         iterator1++; //Incrementing the value of the variable
20     }
21     document.write("<br>loop end");
22 </script>
23 </body>
24 </html>
25
26
```

The screenshot shows a Visual Studio Code editor with a file named 'js_while_loop.html'. The code defines a while loop that prints '0 Antrunys Techs' through '4 Antrunys Techs' on separate lines. The loop condition is 'iterator1 < 5', and the body increments 'iterator1' and writes to the document. The editor's Explorer sidebar on the left shows a project structure with folders for 'SMALLER EXERCISES', 'Angular', 'Day1' through 'Day6', 'Array Iteration', 'Create Element', 'Current Date Time', 'JS String Properties', 'JSON', 'LocalStorage', 'Objects', 'Day5', 'Class', 'JS Function Invocation', 'Loops', and 'Report'.

Output:

1. Antronsys Tech
2. Antronsys Tech
3. Antronsys Tech
4. Antronsys Tech
5. Antronsys Tech
Loop end

Do..while:

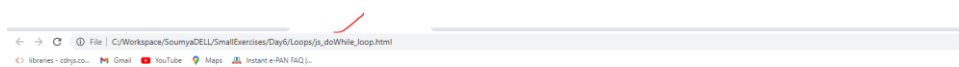


This is an exit controlled loop; the loop body executes at least once, even if the condition is not true. This is because the condition is tested when the loop body ends. If the condition returns **true**, the code inside the loop executes again. If it returns **false**, the JavaScript interpreter exits the loop.

The syntax of a **do...while** statement is as follows:

```
do
{
//code executed at least once
}while (condition);
```

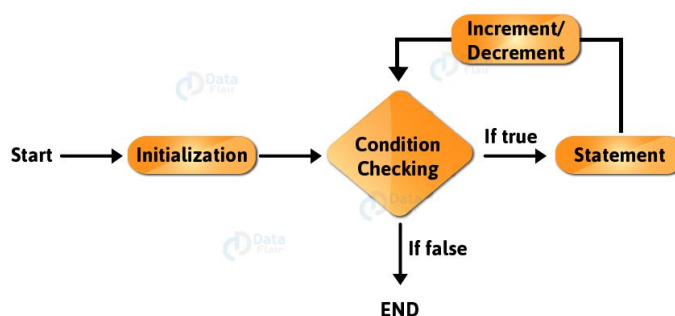
Output:



1. Hi welcome to HelloWorld
 2. Hi welcome to HelloWorld
 3. Hi welcome to HelloWorld
 4. Hi welcome to HelloWorld
 5. Hi welcome to HelloWorld

Loop end

For..:



JavaScript **for loops** are similar to Java and C language **for loops**. It's an entry controlled loop. It consists of three parts, separated with a semicolon:

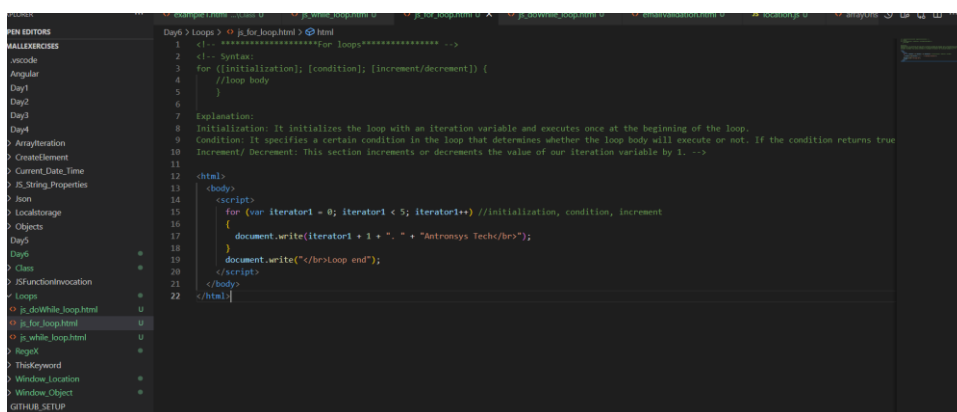
- **Initialization:** It initializes the loop with an iteration variable and executes once at the beginning of the loop.
- **Condition:** It specifies a certain condition in the loop that determines whether the loop body will execute or not. If the condition

returns true, the code inside the **for** loop will execute. If it returns false, the control moves onto the statement after the loop.

- **Increment/ Decrement:** This section increments or decrements the value of our iteration variable by 1.

These three sections are not compulsory, but make sure you remember the semicolons. The syntax of **for statement** looks like this:

```
for ([initialization]; [condition]; [increment/decrement]) {  
    //loop body  
}
```



Output:

